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## ABSTRACT

This report uses the 1979-1996 National Household Surveys on Drug Abuse to investigate the role of parents, especially members of the baby boom generation, on the marijuana use of children. The association of marijuana use between parents and children, the differences among parental birth cohorts, and the determinants of child marijuana use are investigated. Five major research goals are addressed: develop a strategy to define parental exposure to the marijuana epidemic; assess the strength of the association between parental and child marijuana use according to pattern and extensiveness of use, by sex of parent, and age, sex and ethnicity of child; assess the impact of membership in the baby boom generation and parental exposure to the marijuana epidemic on child marijuana use; determine the unique influence of parental marijuana use on the child's marijuana use; identify important predictors of marijuana use by young people in addition to parental marijuana use. The report addresses the research goals outlined above through descriptive and multivariate analyses. The Technical Appendix provides details about the construction of the drug use and other selected variables. Appendix tables present survey-specific data for the multiple surveys that are aggregated in most of the tables presented in the main body of the report. (Contains approximately 76 references, 50 tables, and 15 figures.) (GCP)

**Parental Influences on Adolescent Marijuana Use  
and the Baby Boom Generation:  
Findings from the 1979–1996  
National Household Surveys on Drug Abuse**

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# **Parental Influences on Adolescent Marijuana Use and the Baby Boom Generation: Findings from the 1979-1996 National Household Surveys on Drug Abuse**

by

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## HIGHLIGHTS

### *Purpose and Nature of the Report*

- Following a steady decline in the use of marijuana by young people in the US throughout the 1980s, use increased sharply beginning in the early 1990s. The causes for this increase remain to be understood.
- This report had two major aims: 1) A major aim was to test the hypothesis that the increase in marijuana use by recent generations of young people was due to the fact that their parents were members of the baby boom generation. These parents belonged to cohorts who became heavily involved in using marijuana, and who, because of their adolescent experience, may have unintentionally facilitated the use of marijuana by their children. 2) A second aim was to assess the extent of parental influence on children's marijuana use, irrespective of membership in the baby boom cohorts.
- The analyses took advantage of the inclusion of multiple respondents per household in the National Household Surveys on Drug Abuse, a series of repeated national cross-sectional surveys of the population aged 12 and older. Clustering provided samples of parent and child dyads drawn from the same households.
- The analyses were based on 9,463 dyads composed of one parent (mother or father) and one child aged 12 to 25 per household from 10 surveys conducted from 1979 to 1996.
- Descriptive, multivariate logistic regression analyses, and a limited number of structural equation models were estimated.
- Five periods of the marijuana epidemic from 1963 to 1996 were identified in terms of marijuana use incidence and prevalence. Birth cohorts were characterized by type of exposure to the epidemic experienced at ages 15-18, the years of highest risk for involvement in marijuana. Nine groups of cohorts with different types of exposure were identified.
- Based on drug use reports provided independently by parents and children, the association in marijuana use between parents and children was assessed as a function of parental exposure to different periods of the marijuana epidemic.
- Predictors of the children's marijuana use other than parental marijuana use and parental birth cohort were also examined. These factors included sociodemographic characteristics, behavioral and attitudinal characteristics of parent and child, including parental use of drugs other than marijuana, and parent and child marijuana related attitudes and delinquency.

## *Results*

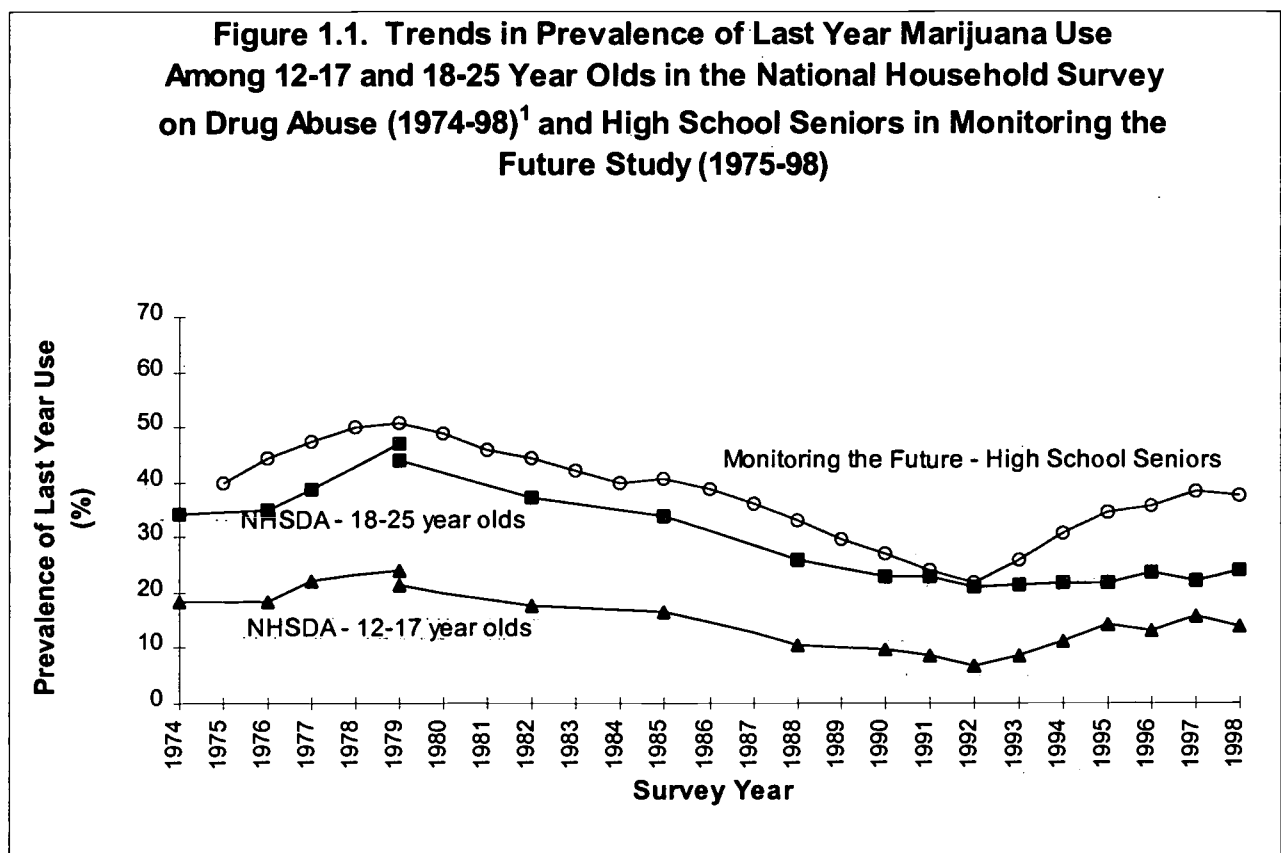
- Parental membership in the baby boom generation (1946-1964 birth cohorts) did not account for the differential rates of children's marijuana use.
- Lifetime marijuana use rates among parents of youths and young adults approximately doubled from 1979 to 1994, reflecting the increasing dominance of the baby boom cohort among parents. However, most of this increase occurred during the 1980's, a period in which youth and young adult drug use rates were declining.
- During the period of rapid increase in youth marijuana use (1992 to 1995), the percent of parents who were baby boomers or who had ever used marijuana did not change enough to have been a major factor in the youth increase.
- Parental lifetime and last year marijuana use increased the risk that a child would ever use marijuana. Controlling for parent and child sociodemographic characteristics, the children of parents who ever used marijuana were about three times as likely to have ever used marijuana as the children of parents who never used the drug. With additional control for attitudinal and behavioral characteristics, the risk declined to about two.
- Parents who stopped using marijuana and those who were currently using marijuana had children who used marijuana at similar rates. This suggests that parental influence does not reflect imitation of the parent by the child but the effect of the parent having chosen to become a marijuana user.
- The influence of parental marijuana use on child lifetime marijuana use was similar for mothers and fathers, and sons and daughters.
- Parental influence on child marijuana use did not vary among racial/ethnic groups, after controlling for parent and child characteristics.
- Parental use of cigarettes, alcohol and cocaine each independently increased the risk that a child will use marijuana over and beyond the influence of parental use of marijuana.
- Parents who perceived little risk associated with marijuana use had children with similar beliefs. In addition, parental attitudes had an indirect effect on the child's use through the child's own attitudes.
- Adolescent attitudes had the strongest association with adolescent marijuana use of any of the three adolescent characteristics that were examined. Adolescents who perceived no risk or slight risk in occasional marijuana were twelve times more likely to have used marijuana in the last year than adolescents who perceived great risk.
- The association between adolescent marijuana use and attitudes about the lack of harm associated with marijuana use was five times as strong as the association between adolescent and parental use.

- Adolescent delinquency had a strong association with adolescent marijuana use and attitudes about the lack of harm associated with marijuana use.
- The association between adolescent delinquency and marijuana use was four times as strong as the association between adolescent and parental use.
- Adolescents who dropped out of school were significantly more likely to use marijuana than non-dropouts.
- Externalizing behavioral problems (e.g., aggression, delinquency) were more strongly associated with adolescent marijuana use than were internalizing problems (e.g., anxiety, depression).
- Sociodemographic characteristics, including ethnicity, parental education and marital status, were weakly associated with adolescent marijuana use.

# CHAPTER 1: INTRODUCTION

## 1.1 Adolescent Use and Parental Influences

The increase in marijuana use by adolescents, particularly young teens, during the nineties (SAMHSA, 1998a, b; 1999; Johnston et al., 1998) is striking and remains to be understood. Following a steady decline from the high prevalence levels observed in the late seventies, sharp increases beginning in 1993 through 1997 were observed among young people, especially adolescents (see Figure 1.1). A slight decline has been observed among adolescents between 1997 and 1998. Among youths aged 12-17 in the United States, the annual use of marijuana reached a high of 21.3% in 1979, decreased to a low of 6.9% in 1992, increased to 15.8% in 1997, and was 14.1% in 1998 (SAMHSA 2000).



<sup>1</sup> Estimates for 1979 through 1993 were adjusted for changes in question format as of 1994.

Sources: SAMHSA (1991; 1998b); University of Michigan.

Several explanations for the increase have been proposed: the coming of age of a new generation of youths who have had little direct exposure to the negative consequences of drug use in an era of declining drug use (Bachman, et al., 1998); a decrease in drug prevention efforts; and reduced governmental and media attention to the drug problem. Another relevant factor

might be the influence of parents who, as members of the baby boom generation, belonged to cohorts heavily involved in marijuana use in their own youth. Because of their cultural and historical experiences in adolescence, these parents may be more likely to have children who use marijuana themselves.

Various individual and social factors have been related to drug use by young people. Individual factors include unconventional attitudes, lack of religiosity, inadequate school performance, and poor relationships with parents (Hawkins et al., 1992). Drug use in the immediate social environment of young person, especially drug use by peers, has consistently been identified as a most important factor (Bailey and Hubbard, 1991; Bauman and Fisher, 1986; Dishion and Loeber, 1985; Flay et al., 1994; Hawkins et al., 1992; Iannotti and Bush, 1992; Kandel, 1980; Urberg et al., 1990). Drug use by parents has also been found to be related to and to predict drug use by adolescents. Moreover, the influence of parents relative to the influence of peers may be stronger than is generally thought. Because of methodological issues, the influence of peer drug use relative to the influence of parental use may have been overestimated by as much as a factor of five (Kandel, 1996).

Relatively few studies have examined the impact of parental marijuana use on child use. To the best of our knowledge, we have identified eight studies. Most were conducted more than a decade ago and are about evenly divided among those that relied on perceived parental behavior (Fisher et al., 1987; Forster, 1984; Huba and Bentler, 1980; Johnson et al., 1984; Newcomb and Bentler, 1986) and independent parental reports of their marijuana use (Andrews et al., 1993; Brook et al., 1985; Gfroerer, 1987; Hops et al., 1996; Kandel, 1974; Kandel and Andrews, 1987). One study examined both types of reports (Newcomb et al., 1983). Parental effects of marijuana use have been documented for mothers and fathers, sons and daughters, with no differences by parent or child gender (Gfroerer, 1987; Hops et al., 1996; Huba and Bentler, 1980; Kandel, 1974; Kandel and Andrews, 1983; Newcomb et al., 1983). Only one study (Newcomb and Bentler, 1986) examined the association between perceived parental use and self-reported child marijuana use as a function of ethnicity. The association was stronger among whites and Hispanics than African-Americans. Similarity between parents and children in drug use has also been documented on the basis of independent reports from each respondent for the use of cigarettes (Kandel and Wu, 1995; Bauman et al., 1990; Gfroerer, 1987; Needle et al., 1986; Rittenhouse and Miller, 1984), alcohol (Barnes et al., 1986; Gfroerer, 1987; Green et al., 1991; Lau et al., 1990), and cocaine (Gfroerer, 1987). Gender and ethnic patterns of association with these other substances differ from those observed with respect to marijuana. Maternal influence for smoking appears to be more powerful than paternal influence (Kandel, 1974; Kandel and Wu, 1995), particularly among daughters (Charlton and Blair, 1989; Chassin et al., 1986; Clayton, 1991; Kandel and Wu, 1995). A sex-specific impact of parental alcohol use has been reported, particularly for sons (Cadoret et al., 1980; Cloninger et al., 1981) and to a lesser extent for daughters (Bohman et al., 1981). The influence of parental smoking on child cigarette smoking is greater among white than African-Americans and Hispanics (Griesler and Kandel, 1998; Sussman et al., 1987).

The National Household Survey on Drug Abuse (NHSDA) provides an unusual opportunity for investigating parental influences on children's marijuana use, particularly as a function of parental membership in the baby boom generation. In a number of households, up to two respondents were selected for participation in the surveys. In most of these households, one respondent was an adult, providing independent data on parental patterns of drug use in dyads of parents and children. The multiple surveys spanning close to a twenty-year interval provide variations in the adolescent drug experiences of parents, variations in the historical context of the parents' adolescent experiences, and variations in the historical periods in which the children reached developmental periods of risk for initiation into marijuana use.

Two earlier analyses of parent-child associations in drug behavior were conducted on the NHSDA. In analyses of parent-child pairs in the 1974, 1976 and 1977 surveys, Rittenhouse and Miller (1984) found that current maternal cigarette smoking and alcohol use were significantly associated with child lifetime and current marijuana use. Paternal cigarette smoking and alcohol use had no impact on youth substance use. Parental marijuana use was not examined. In subsequent analysis of dyads in the 1979 and 1982 surveys, Gfroerer (1987) examined same- and cross-drug associations for parent and child cigarette, alcohol, marijuana and cocaine use. Many more significant associations in substance use occurred for mothers than fathers. Although parental use of all classes of substances was associated with child marijuana use, the lifetime use of marijuana by mothers and fathers was strongly and uniquely associated with child lifetime and current marijuana use, controlling for sociodemographic characteristics and parental current cigarette smoking and alcohol use. The association between parental and child drug use was stronger for marijuana than for cigarettes, alcohol or cocaine.

## **1.2 Aims of Report**

We undertook research in the NHSDA to investigate the role of parents, especially members of the baby boom generation, on the marijuana use of children. We investigated the association of marijuana use between parents and children, the differences among parental birth cohorts, and the determinants of child marijuana use. We addressed five major research goals:

- 1) Develop a strategy to define parental exposure to the marijuana epidemic.
- 2) Assess the strength of the association between parental and child marijuana use according to pattern and extensiveness of use, by sex of parent, and age, sex and ethnicity of child.
- 3) Assess the impact of membership in the baby boom generation and parental exposure to the marijuana epidemic on child marijuana use. In particular, determine whether parents who were members of baby boom birth cohorts at the highest risk for marijuana initiation in their adolescence influence the behavior of their children differently from parents from other birth cohorts, i.e., baby boom cohorts that did not experience the explosion in marijuana use in the 1970s, or cohorts that preceded or followed the baby boom generation.



- 4) Determine the unique influence of parental marijuana use on the child's marijuana use, controlling for other determinants of the child's use, in particular, parental use of drugs other than marijuana.
- 5) Identify important predictors of marijuana use by young people in addition to parental marijuana use. This analysis is constrained by the limited data other than drug use available in the NHSDA.

This report is based on parent-child dyads available in NHSDA surveys conducted from 1979 to 1996, i.e. the 1979, 1982, 1988 and 1990-1996 surveys. Although dyadic data were ascertained in the 1974, 1976 and 1977 surveys, they are not available for analysis. Dyadic data were not collected in 1985. The report addresses the research goals outlined above through descriptive and multivariate analyses.

### **1.3 Organization of Report**

Chapter 2 outlines the central hypothesis of the study. It proposes an empirical definition of exposure to the marijuana epidemic that is based on a differentiation between incidence and prevalence rates, identifies five different periods of the marijuana epidemic from 1963 to 1996 and identifies the developmental period of highest risk for onset of marijuana use. On the basis of these criteria, the chapter delineates nine groups of birth cohorts with different experiences of the epidemic in a crucial phase of adolescent development. The assessment of the impact of differential parental exposure to the marijuana epidemic on child marijuana use is presented in Chapter 6.

Chapter 3 briefly describes the NHSDA methodology and the dyadic samples available for analysis, and discusses the strengths and weaknesses of the NHSDA for achieving the aims of the research. The chapter also describes the measurement of variables used in the analysis. Complete details about the measurement and construction of the variables are presented in the Technical Appendix.

Chapter 4 presents the sociodemographic characteristics of parents and children in the dyadic sample. Characteristics of children and adults in dyads and those not in dyads are compared to assess the impact of non-systematic sampling on individuals selected for inclusion in dwelling unit pairs.

Chapter 5 reports the rates of marijuana use observed among parents and children and the associations between parent and child use through cross-tabulations and odds ratios. The chapter also includes a comparison of drug use patterns among youths and parents in dyads and those not in dyads.

Chapter 6 assesses the impact of differential parental exposure to the marijuana epidemic on children's marijuana use. The chapter also examines predictors of child marijuana use other than parental birth cohort and membership in the baby boom generation. Limited variables are available in the NHSDA data set to implement such analyses, since the content of the surveys focused almost exclusively on patterns of drug use. Two sets of multivariate analyses were



implemented. One set consisted of multivariate logistic regressions, which provided an overview of the relative importance of different factors, including parental marijuana use, on the child marijuana use. In addition to membership in the baby boom generation, parental exposure to various periods of the marijuana epidemic and parental marijuana use, the predictors included parental use of other substances (cigarettes, alcohol, cocaine), and sociodemographic, attitudinal and personality characteristics of parents and children. The second set of analyses consisted of structural causal models, which provided a more dynamic understanding of the direct and indirect effects of selected parental and child factors on the child marijuana use.

The Technical Appendix provides details about the construction of the drug use and other selected variables.

Appendix tables present survey-specific data for the multiple surveys that are aggregated in most of the tables presented in the main body of the report.

## CHAPTER 2: EXPOSURE TO THE MARIJUANA EPIDEMIC

### 2.1 A Basic Hypothesis

A basic hypothesis of the study was that child marijuana use would be most strongly associated with parental marijuana use among families where the parent was a member of baby boom generation cohorts that were exposed to the marijuana epidemic in adolescence. This hypothesis was based on the assumption that cultural and historical factors experienced by parents influence involvement in marijuana use by their children. This would be reflected in a greater association in marijuana use within parent-child dyads among baby boom families exposed to the marijuana epidemic than among those not exposed or in non-baby boom families. Cohorts born between 1946 and 1964 constitute the baby boom generation (Light, 1988).

An empirical test of the hypothesis required a clear definition and delineation of the marijuana epidemic, the historical period when it was manifest, and parental exposure to the epidemic in critical periods of development, when risk for marijuana initiation is the highest.

### 2.2 Definition of Exposure to the Marijuana Use Epidemic

In classical epidemiology, the beginning of an epidemic is usually conceptualized in terms of incidence rates, with the first case marking the beginning of the epidemic and exposure to it adjusted for any relevant incubation period (Kelsey, 1996). Such a criterion may not be appropriate to a drug epidemic, where modeling and socialization play important roles and may depend upon a critical mass of users. The concept of an epidemic may not even be appropriately applied to historical changes in marijuana use. While traditional epidemics may have an insidious onset, the experience of a marijuana epidemic requires an explicit awareness of patterns of behavior in society.

We considered that two features of marijuana consumption in the population may affect individuals' perceptions and experiences of cultural changes related to marijuana use: incidence, i.e., the rate of new users in the population, and prevalence, i.e., the rate of users at any particular time. We conceptualized that the adolescent experience of the marijuana epidemic involves exposure to two features of marijuana use in the population: exposure to *high (or increasing) incidence* rates and exposure to *high prevalence* rates of use, especially among young adults. High prevalence results from high incidence rates and sustained use after increases in incidence. Different parental birth cohorts were exposed to different rates of incidence and prevalence of use in their adolescence. The differentiation between incidence and prevalence constitutes a novel way of conceptualizing exposure to the marijuana epidemic.

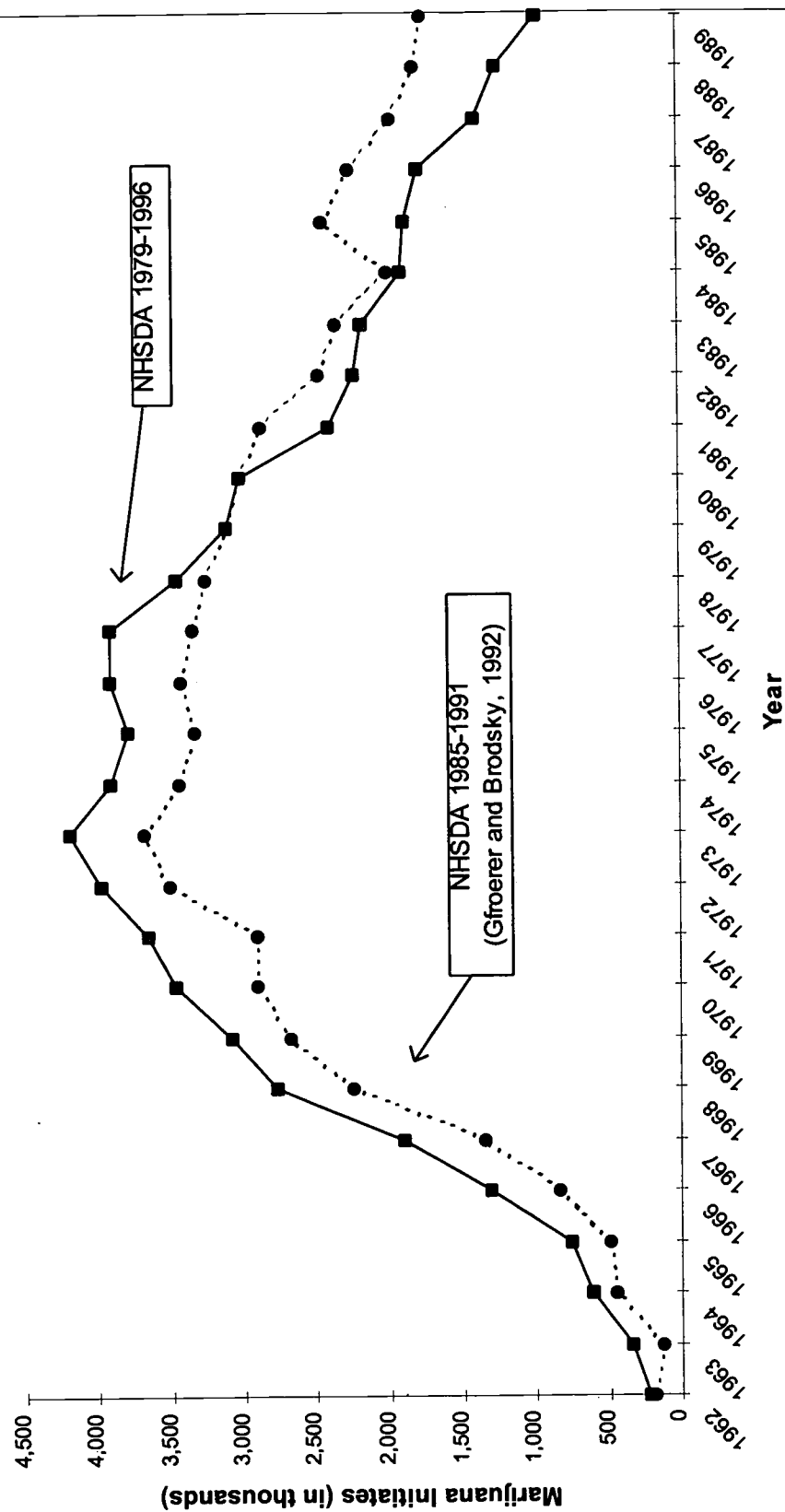
### 2.3 Identification Of Historical Incidence and Prevalence Periods

We examined changes in yearly rates of incidence and prevalence of marijuana use in the population to identify historical periods that marked the marijuana use epidemic and to delineate which birth cohorts experienced the epidemic in adolescence, according to the incidence and prevalence criteria. A problem in using these concepts to define the experiences of various birth cohorts is that incidence and prevalence rates do not show sharp changes, especially in the declining phase, so that the delineation of boundaries for the epidemic is somewhat imprecise. We examined data from the NHSDA and *Monitoring the Future Study* to identify these historical periods. As regards incidence, we extended the analyses conducted by Gfroerer and Brodsky (1992), Johnson and Gerstein (1998) and Johnson et al. (1996) in the NHSDA of the *number of initiates* by increasing the number of survey years both backward and forward in time and disaggregating the five-year grouped birth cohorts into single years. Because of differences in the age structure of the U.S. population over time, we also estimated incidence *rates for onset* for all ages, and by ages 16 and 19, by dividing the number of initiates by the size of the age-specific population at risk for initiation. [See Johnson and Gerstein (1998) for a discussion of the difficulties involved in specifying a denominator.] The incidence analysis generated approximate numbers because of imprecision in the denominator used to calculate the rates. The census-based population data for each year of historical interest, years 1962 to 1996, were only available for five-year age groups. In addition, we did not subtract from the base population sample the number of youths who had already started to use marijuana by each age up to age 19 and were no longer at risk for onset. We assumed that while this might bias somewhat the absolute rates it would not affect significantly the shape of the curve over the thirty-year interval. This assumption may be incorrect, however. We used as a denominator the number of persons aged 10-19 in each of the survey years. While the boundaries are somewhat imprecise, they are probably valid within a couple of years.

As regards prevalence, in addition to specific distributions of last year marijuana use in published NHSDA reports for 14 surveys (years 1974, 1976, 1977, 1979, 1982, 1985, 1988 and 1990-1996), we also examined last year use reported by high school seniors in *Monitoring the Future* for years 1976-1997 (Johnston et al., 1998; U Michigan, 1998).

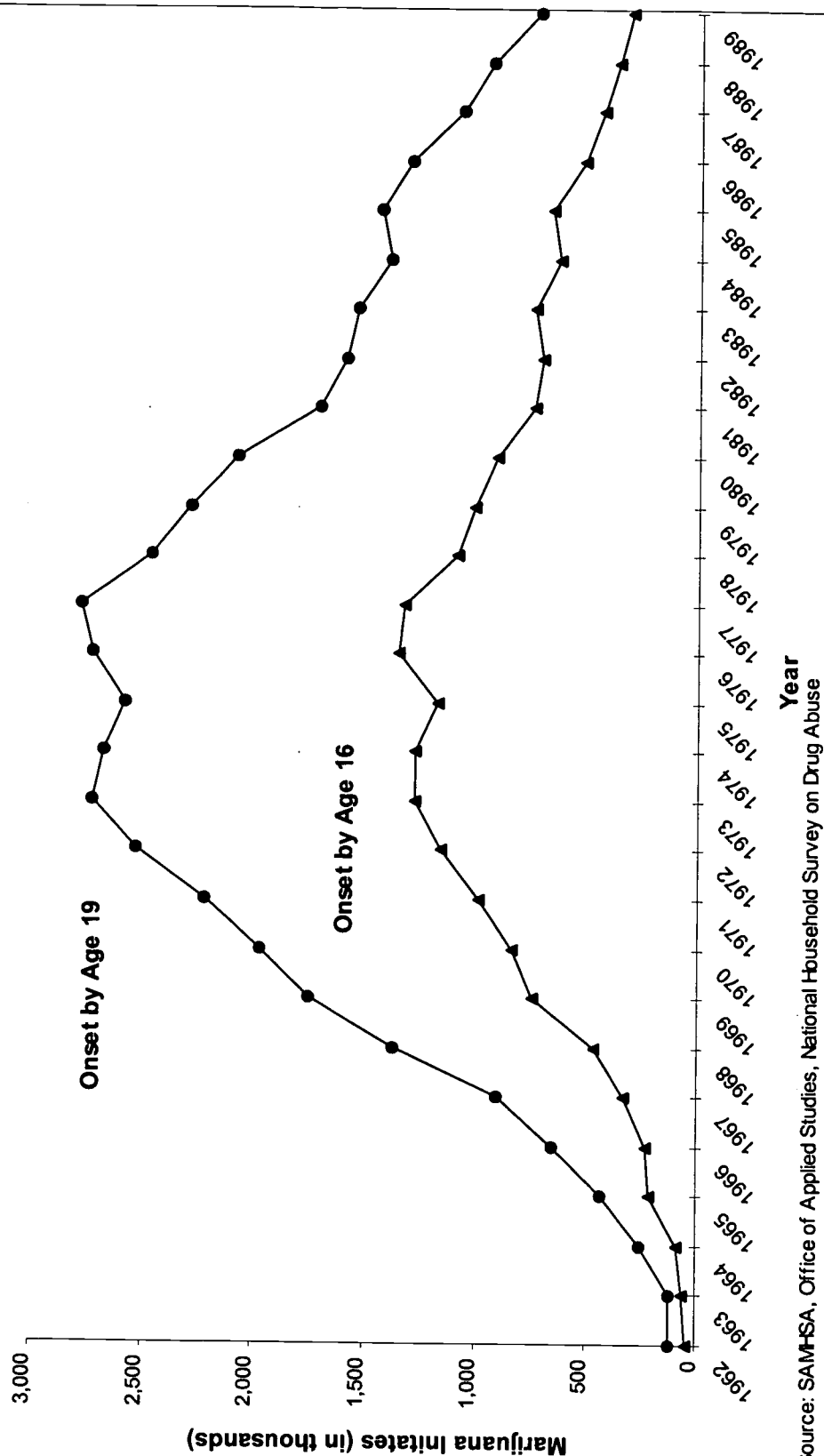
Figure 2.1 shows the estimated *number of marijuana use initiates* in the total population from Gfroerer and Brodsky (1992) based on NHSDA 1985-1991 and a replication based on NHSDA 1979-1996. The number of marijuana use initiates in the total population increased from 1962 to 1972, peaked in the years 1973 to 1977, and beginning in 1978 declined gradually through 1989. The peak years were the same for individuals who started using marijuana by age 16 and those who started later by age 19 (Figure 2.2).

Figure 2.1. Estimated Number of Marijuana Initiates in the U.S. Population Aged 12 and Older, 1962-1989. (Based on Reported Age of Onset)



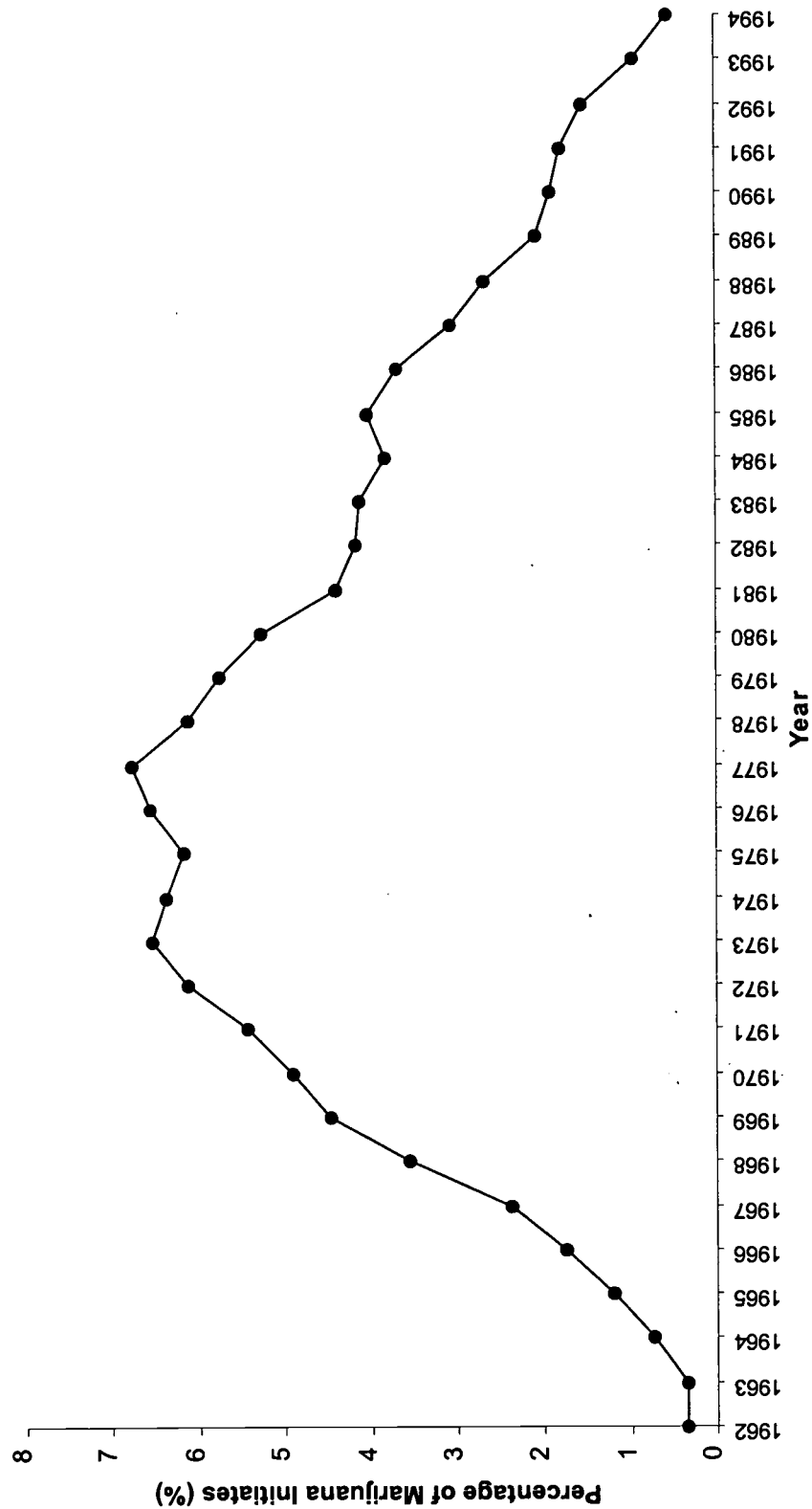
Source: Gfroerer and Brodsky, 1992.

Figure 2.2. Estimated Number of Marijuana Initiates by Ages 16 and 19 in the U.S. Population, 1962-1989. (Based on Reported Age of Onset, NHSDA 1979-1996)



Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse

**Figure 2.3. Percentage of Marijuana Initiates by Age 19 Among 10-19 Year Olds in the U.S. Population, 1962-1989. (Based on Reported Age of Onset, NHSDA 1979-1996)**



Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse

The same trend curve is observed for *percentages* of marijuana initiates (Figure 2.3) as was observed for *number* of initiates.

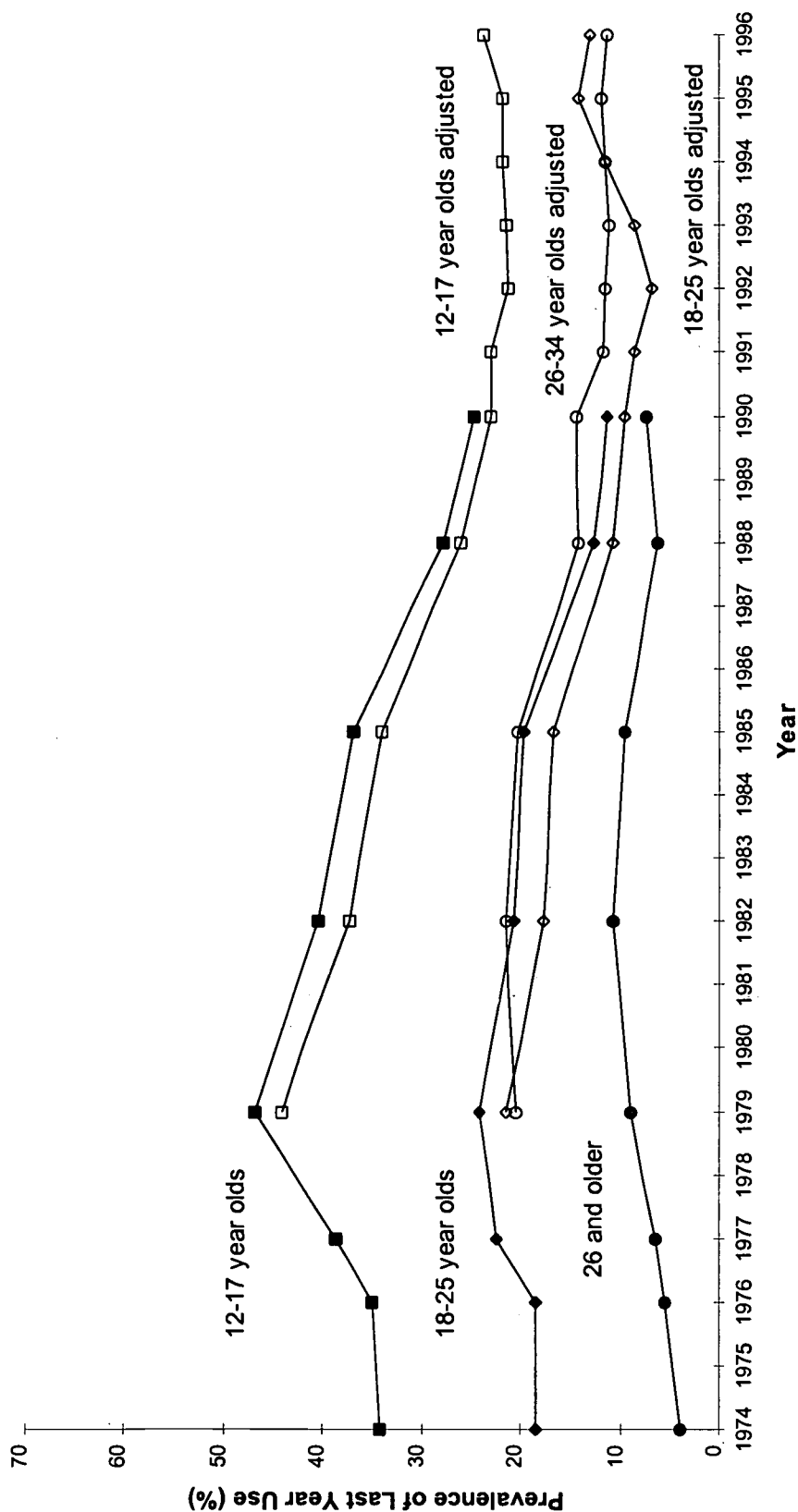
Since the NHSDA surveys were not administered annually until 1990, year-specific prevalence rates for prior years cannot be estimated (SAMSHA, 1998b). Table 2.1 displays trends in the prevalence of lifetime and last year use in the total population, while Figure 2.4 displays last year rates of marijuana use separately for age groups 12-17, 18-25 and 26 and older or 26-34, depending on the availability of published data for different survey years. The highest rates of last year use by those 26 years or older peaked in 1981-1984, while the rates for younger respondents peaked two years earlier in 1979. Similarly data from *Monitoring the Future* indicate that the rates of lifetime marijuana use by 12<sup>th</sup> graders peaked in 1979-1980 and rates of last year use in 1979 (Figure 2.5).

To highlight similarities and differences in incidence and prevalence patterns, Figure 2.6 displays on the same graph incidence rates, i.e., the estimated *percent* of initiates by age 19 from 1962 to 1994, as well as prevalence rates, i.e., the *percent* of last year marijuana use among 18 to 25 year olds from 1974 to 1996 in the NHSDA. While incidence rates by age 19 peaked in 1977, the highest marijuana prevalence in the NHSDA occurred in 1979 for adolescents and young adults.

Based on changes in rates of incidence and last year prevalence identified from these analyses and from published findings, described above, we delineated five historical periods that defined different periods of the marijuana epidemic and characterized the cultural context with respect to marijuana use of the parents in their adolescence.

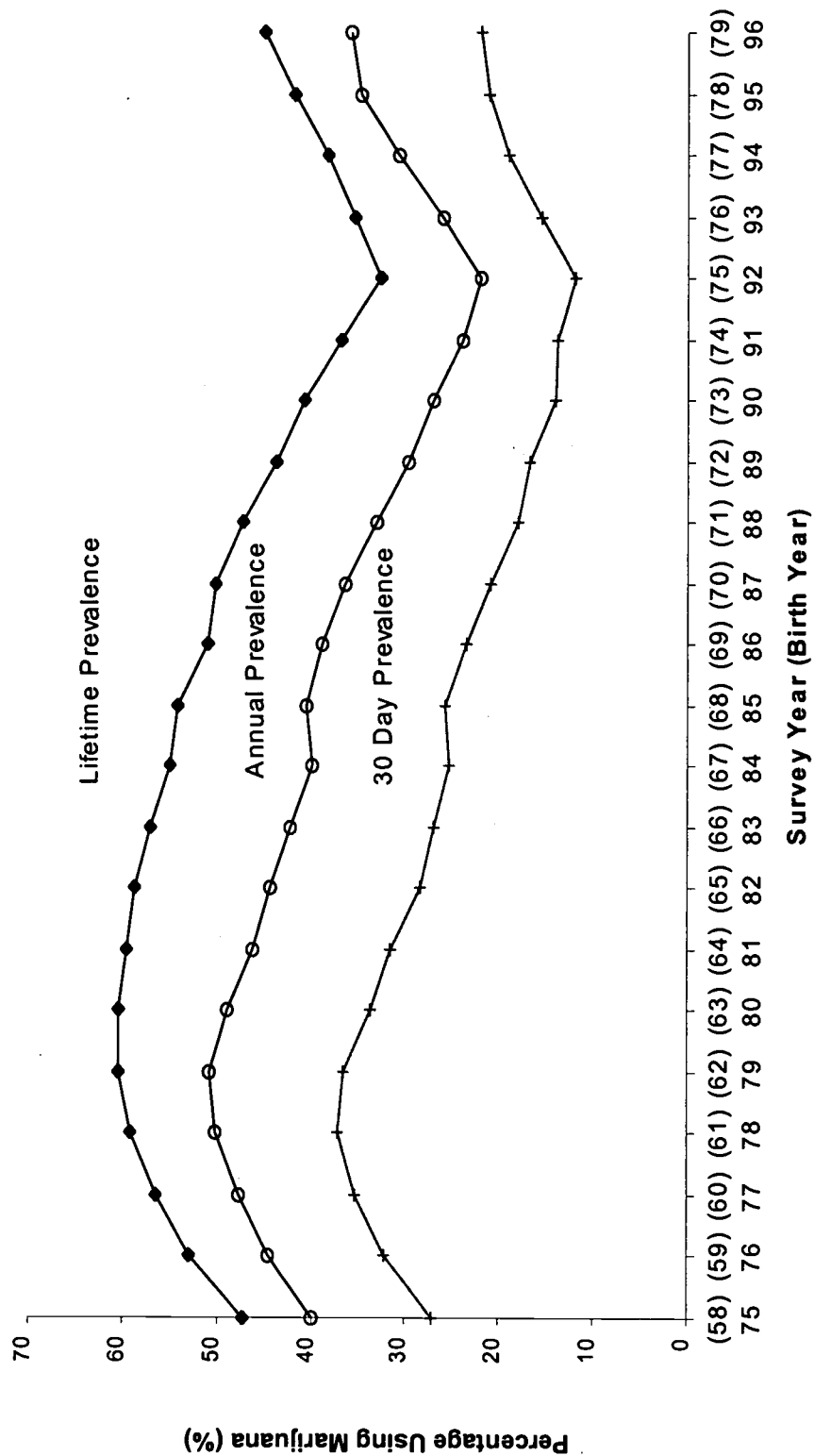
- (1.) 1963 and earlier: Pre epidemic; low incidence and prevalence of marijuana use.
- (2.) 1964-1971: Low marijuana incidence; the number of new users began to increase.
- (3.) 1972-1977: High marijuana incidence; the number of new marijuana users peaked and remained high among all age groups.
- (4.) 1978-1982: High marijuana use prevalence; the number of new users gradually decreased but the rates of prevalence were at their highest levels, especially among young adults 18-25 years old.
- (5.) 1983 and later: Post-epidemics; incidence and prevalence rates declined.

**Figure 2.4. Trends in Prevalence of Last Year Marijuana Use Among Persons Aged 12-17, 18-25, 26-34 or 26 and Older in the U.S. Population:**  
(NHSDA 1974-1990 and 1979-1996)



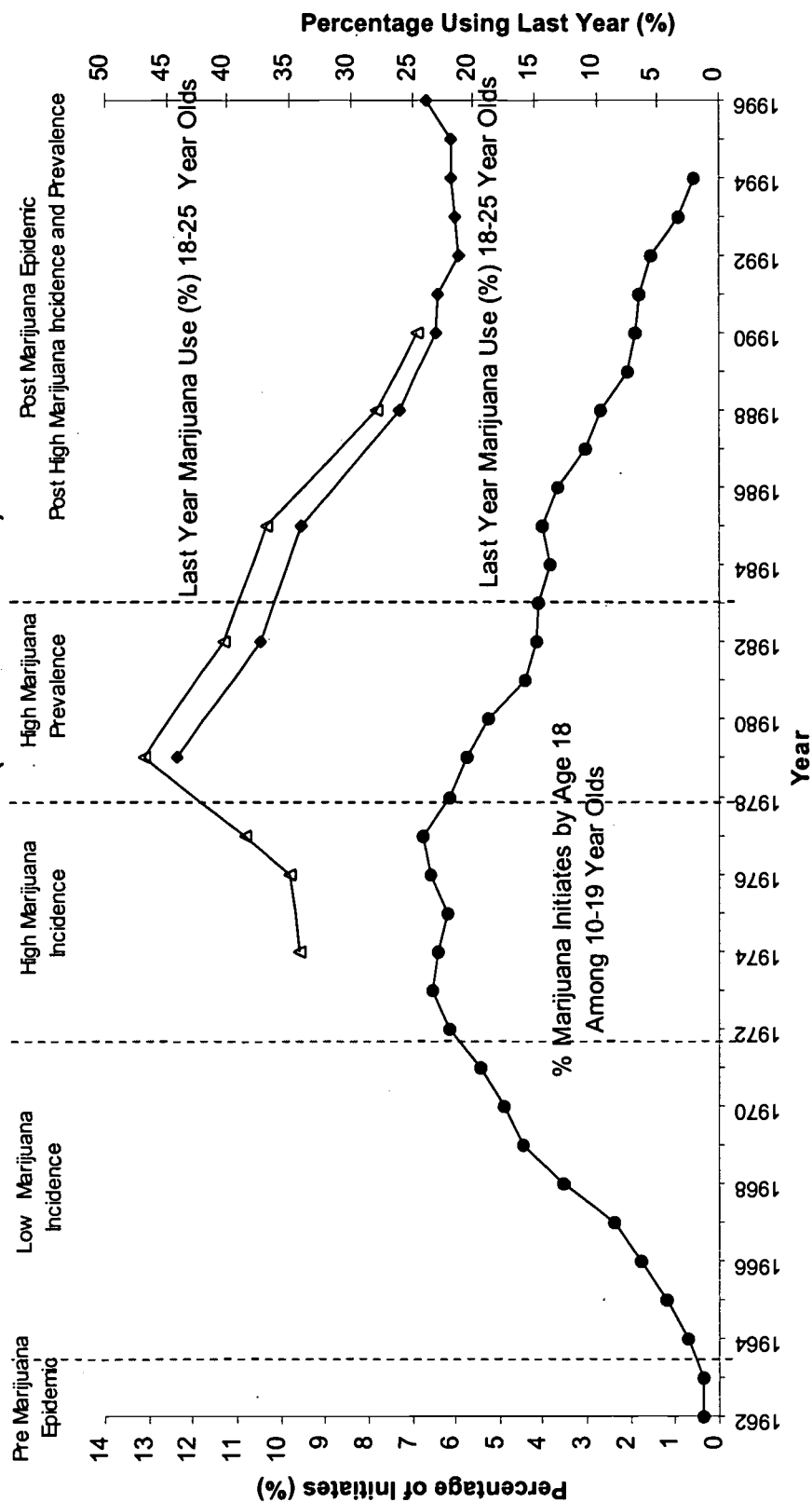


**Figure 2.5. Monitoring the Future Study: Trends in Marijuana Use by Survey Year for 12th Graders**



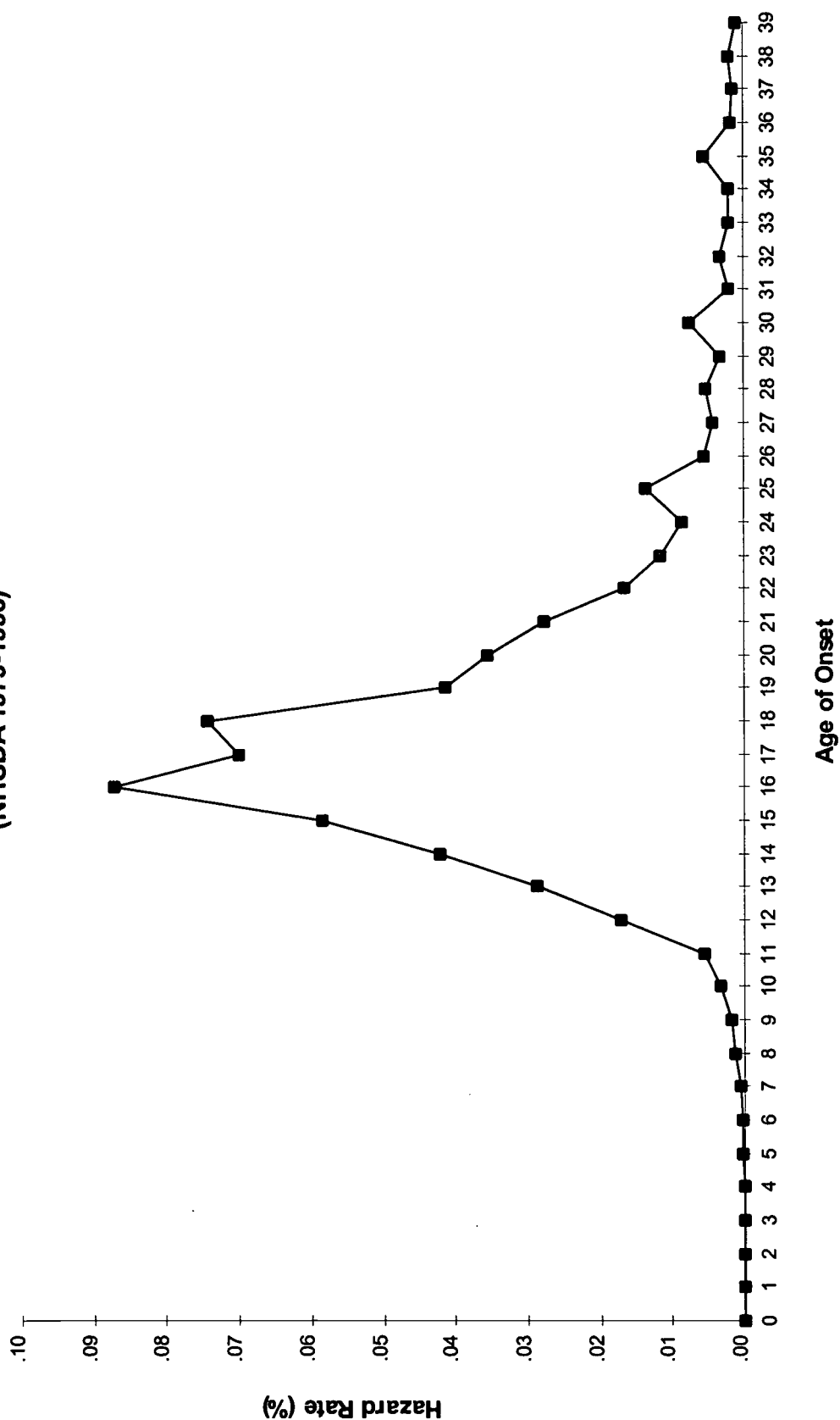
Source: University of Michigan (1998).

**Figure 2.6. Percentage of Marijuana Initiates by Age 19 Among 10-19 Year Olds in the U.S. Population and Prevalence of Last Year Marijuana Use Among 18 to 25 Year Olds, by Historical Year (NHSDA 1974-1996)**



Sources: SAMHSA (1991; 1998b).

**Figure 2.7. Hazard Rates of Marijuana Use Initiation by Age for All Birth Cohorts  
(NHSDA 1979-1996)**



## 2.4 Identification of Ages at Risk for Initiation of Marijuana Use:

To place the relevant adolescent experience of different birth cohorts in the context of the five historical phases of the marijuana epidemic, it was necessary to define the developmental periods of greatest risk for initiation to marijuana use. Although the average age of marijuana onset decreased slightly over time from 1964 to 1989 (Gfroerer and Brodsky, 1992), for simplicity all cohorts were considered together.

To delineate the ages at highest risk for initiation of marijuana use, we examined the distribution of ages of onset among the self-reported users in the 1979-1996 NHSDA surveys (Table 2.2). We also calculated the hazard rate of marijuana use initiation (Figure 2.7). Since the hazard rates take right censoring (i.e., initiation may occur at a later age for many young respondents in the NHSDA) into account, they provide more precise estimates of the age-related risk for marijuana onset. Both the age-specific distribution of initiates and the hazards converged in highlighting ages 15-18 as the years of highest risk. Kandel and Logan (1984) had earlier shown by following a cohort over time that the hazard for onset of marijuana use starts to increase at age 13 and peaks at age 18. We concluded that ages 15-18 constituted the adolescent years of highest risk for marijuana initiation. These ages were used to characterize the duration of exposure to historical periods of marijuana use (or marijuana epidemic) for each cohort.

Appendix Figure A.2.1 illustrates the slight increases in the steepness of the hazard curves and shifting to the left among cohorts born between 1940 and 1984. This confirms Gfroerer and Brodsky's (1992) conclusion noted above that the average age of marijuana use onset decreased slightly from 1964 to 1989.

## **2.5 Cohort-Specific Exposure to Different Periods of the Epidemic**

In a next step, we identified the parental birth cohorts who experienced different periods of the marijuana epidemic during ages 15-18. Some birth cohorts spent the years 15-18 entirely in one historical period ("pure" exposure); other birth cohorts spent the years 15-18 in two adjacent periods ("mixed" exposure) (Table 2.3).

Nine types of cohorts were identified as listed on Table 2.4.

The delineation of these nine groups of cohorts provided the basis for examining the impact of parental membership in the baby boom generation on child marijuana use. Since very few parents fell into the two post epidemic cohorts, these two groups were aggregated in the analysis.

Table 2.1. Trends in Prevalence of Lifetime and Last Year Marijuana Use by Age<sup>1</sup> (NHSDA 1974-1996)

	1974	1976	1977	1979	1982	1985	1988	1990	1991	1992	1993	1994	1995	1996
	%	%	%	%	%	%	%	%	%	%	%	%	%	%
<b>Lifetime</b>														
12-17 years	23.0	22.4	28.0	26.7	23.2	20.1	15.0	12.7	11.1	9.1	9.9	13.6	16.2	16.8
18-25 years	52.7	52.9	59.9	66.1	61.3	57.6	54.6	50.4	48.8	46.6	45.7	41.9	41.4	44.0
26-34 years	-	-	-	45.0	51.5	54.1	57.6	56.5	55.2	54.3	54.9	52.7	51.8	50.5
26+ years	9.9	12.9	15.3	-	-	-	-	-	-	-	-	-	-	-
35+ years	-	-	-	9.0	10.4	13.9	17.6	19.6	21.1	22.2	23.8	25.4	25.3	27.0
<b>Last Year</b>														
12-17 years	18.5	18.4	22.3	21.3	17.7	16.7	10.7	9.6	8.5	6.9	8.5	11.4	14.2	13.0
18-25 years	34.2	35.0	38.7	44.2	37.4	34.0	26.1	23.0	22.9	21.2	21.4	21.4	21.8	23.8
26-34 years	-	-	-	20.5	21.4	20.2	14.2	14.4	11.6	11.5	11.1	11.5	11.8	11.3
26+ years	3.8	5.4	6.4	-	-	-	-	-	-	-	-	-	-	-
35+ years	-	-	-	4.3	6.2	4.3	3.7	4.2	4.6	3.8	4.6	4.1	3.4	3.8

<sup>1</sup>Adjusted estimates prepared by SAMHSA for year 1979-1996 for four age groups. Data for 1974-1977 aggregate all respondents aged 26 and older.

Sources: SAMHSA (1991; 1998b).

Table 2.2. Distribution of Self-Reported Ages of Onset into Marijuana Use<sup>1</sup> Among Users in Aggregate NHSDA 1979-1996 Surveys

Age of Onset	1979-1996	
	N	%
Before 10	799	0.9
10	610	0.7
11	991	1.1
12	2,976	3.4
13	4,682	5.5
14	6,304	7.8
15	7,945	10.2
16	10,471	14.3
17	7,384	11.1
18	6,942	11.4
19	3,512	6.3
20	2,790	5.4
21	2,042	4.3
22	1,145	2.7
23	758	1.9
24	539	1.2
25	802	2.0
After 25	2,380	9.7
Total N	63,072	100%

<sup>1</sup>Weighted estimates, unweighted N's.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse





Table 2.4. Birth Cohorts by Type of Exposure to the Marijuana Epidemic

Birth Cohort	Type of Exposure	Historical Pattern of Marijuana Use	Total N
(1) 1945 and before	(pure)	Pre-epidemic	2,119
(2) 1946-48*	(mixed)	Pre-epidemic/low incidence	1,066
(3) 1949-53*	(pure)	Low incidence	1,951
(4) 1954-56*	(mixed)	Low incidence/high prevalence	1,235
(5) 1957-59*	(pure)	High incidence	1,379
(6) 1960-62*	(mixed)	High incidence/high prevalence	1,165
(7) 1963-64*	(pure)	High prevalence	366
(8) 1965-67	(mixed)	High prevalence/post-post epidemic	166
(9) 1968 and after	(pure)	Post-epidemic	16

\* Members of baby boom generation

## CHAPTER 3: NHSDA METHODOLOGY

### 3.1 Sample Design

The NHSDA is a survey of drug use in the general population that was conducted every two or three years from 1971 to 1988, and has been conducted annually as of 1990. The target population is the civilian, non-institutionalized population of the United States 12 years of age and older.<sup>1</sup> Persons with no fixed address, residents of institutional quarters (such as jails and hospitals) and active military personnel are excluded. Oversamples have been consistently implemented for individuals in the ages of highest risk for drug use (ages 12-34), African-Americans and Hispanics since 1985, and six metropolitan statistical areas in 1991-1993. Current tobacco users were oversampled in the 1993-1995 surveys.

All descriptive analyses, including prevalence rates, cross-tabulations and univariate and multivariate logistic regression analyses were estimated by SUDAAN (Shah et al., 1992), which uses a Taylor series linearization technique to adjust for design effects. All analyses were based on weighted data. The significance of the differences between odds ratios was evaluated through the Wald test.

### 3.2 Sampling of Dyads

In a number of households, two respondents were selected for participation in each survey conducted since 1974. Before 1991, one of these respondents had to be a youth 12 to 17; in more recent surveys the age restriction was eliminated. This report is based on data beginning with the 1979 survey, since dyadic data from prior surveys are not available. In 1985 only one respondent was interviewed in each household. Some information on the sampling of dyads is provided in the NHSDA public release codebooks (SAMHSA, 1992; 1994; 1995; 1996a; 1996b; 1997) and in the 1991-1996 sampling reports prepared by Research Triangle Institute (Allred et al., 1997; Jones et al., 1992; 1993; Jones and Folsom, 1993; 1994; 1995; 1996; Research Triangle Institute, 1997).

Through the 1996 survey, no consistent sampling design was applied to the selection of multiple respondents within households. The dyads were not a representative sample of parent-child pairs living in households in the U.S. and their selection was affected by the within-dwelling unit sampling procedures. These took into account the ethnic classification of the household head, the age group composition of the household and, in the 1993-1995 surveys, the cigarette smoking within the last month of 18-34 year old residents.

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<sup>1</sup> In the surveys prior to 1991, the target population was restricted to the household population of the contiguous 48 states. It included military personnel living in civilian housing but excluded all persons, military and civilian, living in civilian housing on military bases.

Prior to 1993, the population was divided into four age groups: 12-17, 18-25, 26-34 and 35+ years old. In 1992, the 35+ age group was partitioned into those 35-49 and 50+ years old. From 1993 to 1995, those aged 18-25 and 26-34 were classified as 18-34 smokers and nonsmokers, and sampled accordingly. The selection probabilities of particular age groups were based on the desired sample sizes for each age group by race/ethnicity. If an age group was selected for a particular dwelling and the dwelling contained more than one person in that age category, the interviewer would consult a table to determine the specific person to be interviewed. The probabilities of selecting a person within an age group were based on the sample size desired for the age group by race/ethnicity and the number of households expected to contain this age group by race/ethnicity. No more than two persons in one age group could be interviewed in a household. Before 1991, one of the two respondents had to be a youth aged 12-17. In more recent surveys, the age restriction was removed. In 1993-1996, one 12-17 year old and one adult were selected in the majority of cases. When two adult selections were made, most included one smoker and one nonsmoker in 1993-1995, and one 18-25 year old and one 26-34 year old in 1996.

### **3.3 NHSDA Parent-Child Dyads: Dyad Identification and Overview**

Although NHSDA surveys were initiated in 1971, dyadic data were first collected in 1974 but data from the 1974, 1976 and 1977 surveys are not available for analysis. As noted above, parent-child dyads were not ascertained in 1985.

Two methods were used to identify parent-child dyads in the data sets. (1) For survey years 1979, 1982, 1988, 1990, 1991 and 1992, dyads were identified using two relational variables provided to us by Research Triangle Institute. One variable, Relationship of the DU Pair (DURELAT), identified the type of dwelling unit-pair (dyad). Four types were coded: parent-child, husband-wife, other/other, and not in a unit pair. After the parent-child dyads were identified, a second variable, Parent-Child Code (P-C), differentiated parent from child and was used to create the parent-child dyad file. (2) For survey years 1993, 1994, 1995 and 1996, parents and children were linked by us using information from the public use data files. Two individuals were classified as a parent-child pair if they lived in the same household and identified themselves as being a parent or a child of the other respondent. For all survey years (1979-1996), we imposed the criterion that the presumed parent was at least 12 years older than the child. In the 1991-1996 surveys, parent-child pairs with a child aged 12-25 were selected for analysis. We excluded those where the child was 26 years or older, since this represented an atypical living arrangement for this older age group. According to census data, from 1980 to 1996, only 10.4% to 12.3% of young adults aged 25-34 lived at home, and 52.6% to 54.4% of those aged 18-24 did so (U.S. Census Bureau, 1999). From 1989 to 1996, 94.9% to 96.4% of those aged 12 to 17 lived at home (U.S. Census Bureau, 1990-1991; 1992a, b; 1994; 1996a, b;

1998c)<sup>2</sup>. On average 97.0% of 12-17 year olds lived with their mothers; 77.0% lived with their fathers (U.S. Census Bureau, 1998a; b). Excluded dyads with a child 26 years old and older represented 2.4% of all the identified parent-child dyads in the surveys. Since parental self-identification of biological status in relation to the child was only ascertained beginning in 1994, and biological status could not be determined in prior years, both biological and non-biological parent-child pairs were included in the 1994 to 1996 surveys. In these three years, biological offspring accounted for 97.2% of the children in the dyads.

The analyses in this report are based on all ten available waves of parent-child data (1979, 1982, 1988, 1990-1996), including those conducted prior to 1991 where children were interviewed as part of a dyad unit pair only if they were aged 12-17. The 1994 survey included two components, 1994A and 1994B (see Section 3.5). A total of 9,463 parent-child dyads were identified in the aggregated 1979, 1982, 1988 and 1990-1996 surveys. Of the children, 88.6% were 12 to 17 years old, 11.4% were 18 to 25 years old. Close to 21% of all 12-14 year old NHSDA respondents were included in a parent-child dyad, 15.6% of all 15-17 year olds, and 3.1% of all 18-25 year olds (Table A.3.1). The aggregate and year-specific sample sizes of parent-child dyads with children aged 12-25 are reported in Table 3.1 by sex of parent and child. The number of parent-child pairs is much larger in recent than in earlier waves, reflecting increases in the total sample size of the surveys.

### 3.4 Dyad Level Weights

All dyad level weights were constructed and provided by Research Triangle Institute. The year-specific dyad level weights were derived from the person-level sampling weights. Each dyad level weight was the sum of the parent and child year-specific person-level sampling weights, divided by the total number of individuals in the household aged 12 and older. This constructed weight was applied to both members of each dyad.

For the 1979, 1982, 1988, 1990-1996 aggregate sample, new dyad level weights were constructed by multiplying the year-specific dyad weight for each case by the year-specific total number of dyads, and dividing by a constant<sup>3</sup>. The constant was the sum of the year-specific weights weighted by the number of cases per year, divided by the total cases in the aggregate sample (Personal communications, Michael Witt, 1/30/98, 5/26/98)

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<sup>2</sup> Data for 1980 to 1988 are available for 10-17 year olds as a group. The range is 96.0% to 96.8% (U.S. Census Bureau, 1981; 1982; 1985; 1986; 1987; 1988; 1989).

<sup>3</sup> For selected analyses, aggregate samples consisting of the 1991-1994A and 1994B-1996 surveys were used. Dyad level weights were also constructed for these aggregate samples.

### **3.5 Changes in Interview Format in 1994**

The NHSDA schedule is a structured one-hour personal interview, in which the drug questions are answered by respondents in self-administered modules. Until 1994, questions pertaining to tobacco use were answered orally to the interviewer.

In 1994, the interview schedule was substantially revised and selected data processing procedures were modified as well. Two versions of the interview schedule (Forms A and B) were administered in a split sample design to assess the consequences of the changes. Form A retained all the core questions from prior surveys and was administered to one-fifth of the respondents.

Form B constituted the revised version and was administered to four-fifths of the sample. The revisions included changes in the wording of selected drug-related questions; the presentation of the tobacco module in a self-administered format rather than being administered by the interviewer as in prior surveys; the addition of questions on mental health and access to mental health care. [See SAMHSA (1996c) for a detailed presentation of the major changes in the interview schedule]. In addition, different imputation procedures were implemented with data from Form B to define an individual as a drug user in the presence of missing data on drug use reports. In particular, while respondents who answered positively to any question dealing with use in the last twelve months were classified as marijuana users through 1994A, as of 1994B, only answers to the recency of use question were used.

The prevalence estimates of substance use differ between Forms A and B. Estimates of illicit drug use are higher in Form A than Form B, whereas estimates of licit drug use are higher in Form B than Form A, especially for last month tobacco use reported by adolescents. The rates of lifetime and last year marijuana use among age groups are slightly higher in Form A than Form B, with selected exceptions for adults aged 26 and older. For example, the rates of lifetime marijuana use are 16.0% in Form A compared with 13.6% in Form B among respondents aged 12-17; 43.4% compared with 41.9% among those aged 18-25; 56.9% compared with 52.7% among those aged 26-34; and 28.4% compared with 25.4% among respondents aged 35 and older (Table A.3.2). A similar pattern was observed in self-reported marijuana use in the last year. Given these differences in self-reported use, survey year specific analyses for 1994 were conducted for Forms A and B separately.

### **3.6 Advantages and Disadvantages of the NHSDA**

The NHSDA has both advantages and disadvantages for the study of parent-child association in marijuana use.

The advantages include: (1) the large number of parent-child dyads, in which independent data on drug behavior were obtained from each person; (2) the inclusion of mothers and fathers, albeit only one parent per family; (3) the availability of detailed drug use information on both

members of the dyads; (4) the overrepresentation of minorities; and (5) the multiple waves of data available since the late 1970's. The NHSDA surveys include families in which parents were members of the baby boom generation (i.e., the 1946-1964 birth cohorts), families in which the parents were born before 1946, and a very small number who were born after 1964.

The NHSDA also has limitations: (1) The dyads are not a representative sample of parent-child pairs living in households in the United States. Reflecting the gender distributions of parents who participated in the NHSDA as a whole, there is an under-representation of father-child dyads compared with the distribution of fathers residing in households in the U.S. population (see Chapter 4, Section 4.2). Rates of marijuana use are lower among parents and children interviewed as members of dyads than as household members (see Chapter 5, Section 5.1.c). (2) The sampling selection procedures for the overall sample and for multiple respondents in a household varied across survey years, so that the resulting dyadic samples are not necessarily similar over time. (3) The data set includes very little information about factors other than drug use, especially individual characteristics of young people, which are important predictors of drug use. As a result, few variables could be used as controls to provide more accurate estimates of the influence of parental drug consumption on offspring use or as predictors of child marijuana use. (4) Finally, the data are cross-sectional. While we interpret the observed association between parent and child as reflecting the influence of the parent on the child, it is possible, although not likely, that the association reflects in part the influence of the child on the parent.

These limitations notwithstanding, the NHSDA provides an unusual opportunity to address important questions related to the extent of parental influence on children's marijuana use in different parental birth cohorts.

### **3.7 Measurement of Variables**

The definitions of variables was complicated by the fact that the format of the questions, and the coding and imputation of the variables underlying the constructed variables changed over the course of the 10 surveys included in the analysis. Most of the changes took place in the 1988 and 1994B surveys.

The variable labels specified below are from the public use codebooks. Variable labels denoted with an "X" are those that we constructed from available public use variables. Unless otherwise indicated, variables were available in all the surveys included in this report. All imputed variables were constructed by SAMSHA. Details about the construction of the drug use variables and other selected variables appear in the Technical Appendix: Construction of Drug Use and Other Variables.

The differential availability of variables across the surveys determined the selection and grouping of different surveys for analyses based on these variables.



### 3.7.a Marijuana Use Variables

Two dimensions of the child's marijuana use were examined to assess variations in patterns of parental influence on the child lifetime marijuana experimentation and current use: (1) ever used marijuana; and (2) used in the past year. Six marijuana variables were examined for parents: (1) ever used marijuana; (2) used in the past year; (3) a combination of use lifetime and past year to identify former users; (4) frequency of use in the lifetime; (5) frequency of use in the past year; and (6) frequency of use in the past 30 days.

*Parent and child lifetime marijuana use (MRJFLAG): 0=never used marijuana; 1=ever used.*

*Parent and child past year marijuana use (MRJYR and MRJYRX).* For parents and children, a binary variable (MRJYR) was created: 0=no marijuana use in the past year; 1=used in the past year. For parents, a trichotomous variable (MRJYRX) was also created: 0=never used marijuana; 1=former use, not in the past year; 2=used in the past year.

*Parent frequency of lifetime marijuana use (MJTOTX): 0=never used marijuana; 1=used 1-10 times/days lifetime; 2=used 11-99 times/days lifetime; 3=used 100 or more times lifetime.*

*Parent number of days used marijuana in the past 12 months (MJYRFRQX): 0=never used marijuana; 1=former use, not in the past 12 months; 2=used 1-200 days in the past 12 months; 3=used 201-300 days in the past 12 months. Available in 1988 and 1990-1996. Text refers to the variable as "in the past year."*

*Parent number of days used marijuana in the past 30 days (MJDAY3OX): 0=never used marijuana; 1=former use, not in the past 30 days; 2=used 1-10 days in the past 30 days; 3=used 11-30 days in the past 30 days. Text refers to the variable as "in the past month."*

### 3.7.b Other Drug Use Variables: Cigarettes, Alcohol, Cocaine

*Parent lifetime cigarette use (CIGFLAG): 0=never used cigarettes; 1=ever used.*

*Parent past year cigarette use (CIGYRX): 0=never used cigarettes; 1=former use, not in the past year; 2=used in the past year.*

*Parent smoked 100 or more cigarettes in lifetime (CIG5PKX): 0=never used cigarettes or did not use 100 or more cigarettes in lifetime; 1=used 100 or more cigarettes in lifetime.*

*Parent number of cigarettes per day in the past 30 days (CIGMFRQX): 0=never used cigarettes; 1=former use, not in the past 30 days; 2=1-15 cigarettes per day in the past 30 days; 3=16-35 cigarettes per day in the past 30 days; 4=36 or more cigarettes per day in the past 30 days. Text refers to the variable as "in past month."*

*Parent number of cigarettes smoked daily (PACKSX):* 0=never used cigarettes; 1=smoked 1-5 cigarettes per day; 2=smoked 6-15 cigarettes per day; 3=smoked 16-25 cigarettes per day; 4=smoked 26-35 cigarettes per day; 5=smoked 36 or more cigarettes per day.

*Parent lifetime alcohol use (ALCFLAG):* 0=never used alcohol; 1=ever used.

*Parent past year alcohol use (ALCYRX):* 0=never used alcohol; 1=former use, not in the past year; 2=used in the past year.

*Parent frequency of past year alcohol use (IRALCFQX).* Eight categories. See Technical Appendix, Section A.1.b.

*Parent number of times very drunk or high in the past 12 months (DRUNKYRX).* Ten categories. See Technical Appendix, Section A.1.b.

*Parent quantity/frequency of alcohol use in the past 30 days (ALCMFRQX):* 0=never used alcohol; 1=former use, not in the past 30 days; 2=used less than 2 drinks per day in the past 30 days; 3=used 2 or more drinks per day in the past 30 days. Available in 1988 and 1990-1996.

*Parent lifetime cocaine use (COCFLAG):* 0=never used cocaine; 1=ever used.

*Parent past year cocaine use (COCYRX):* 0=never used cocaine; 1=former use, not in the past year; 2=used in the past year.

*Parent frequency of lifetime cocaine use (COCTOTX1 and COCTOTX2).* Two versions were constructed. A four category version (COCTOTX1): 0=never used cocaine; 1=used 1-10 times/days lifetime; 2=used 11-99 times/days lifetime; 3=used 100 or more times/days lifetime. An eight category version is described in the Technical Appendix, Section A.1.b.

*Parent frequency of past year cocaine use (IRCOCFQX).* Nine categories. See Technical Appendix, Section A.1.b.

### 3.7.c Sociodemographic Variables

Ten sociodemographic variables were examined. See Technical Appendix , Section A.2.a. for further detail.

*Parent and child age (IRAGE).* Imputed variable, coded in years. Children were classified into three age groups: 12-14, 15-17 and 18-25 years old. Parents were classified according to their children's ages. Age ranges of parents for each of the three children's age categories were 24-73 years; 27-80 years; and 31-74 years, respectively.

*Parent and child sex (IRSEX).* Imputed variable: 1=male; 2=female.



*Parent race/ethnicity (IRACE).* Imputed variable, four categories: 1=white; 2=African-American; 3=Hispanic; 4=other. Across surveys, ethnicity was based on self-reports for 95.0% of individuals and on interviewers' observations in the remaining cases. To simplify the analysis of dyadic similarity, a single variable based on parental ethnicity was used to characterize the ethnicity of parent and child. In 97.1% of dyads, both respondents were in the same category.

*Parent and child birth cohort (PCOHR TX and CCOHR TX).* Constructed variable. Nine groups of parental birth cohorts (PCOHR TX) were identified based on exposure to historical periods of the marijuana epidemic during ages 15-18, as described in Chapter 2: 1=born 1945 and earlier; 2=born 1946-1948; 3=born 1949-1953; 4=born 1954-1956; 5=born 1957-1959; 6=born 1960-1962; 7=born 1963-1964; 8=born 1965 and 1967; 9=born 1968 and after.

Children were classified into five groups of birth cohorts, each aggregating five birth years. (*CCOHR TX*). Constructed variable, five categories: 1=born before 1964; 2=born 1965-1969; 3=born 1970-1974; 4=born 1975-1979; 5=born 1980-1984.

*Parent and child marital status (IRMARIT).* Imputed variable, five categories: 1=married; 2=divorced/separated; 3=widowed; 4=never married; 5=legitimate skip for respondents aged 12-17 in 1979 and 1982, and aged 12-14 in 1988, 1990-1996.

*Parent and child education (EDUCCT2X).* Recoded variable, five categories: 1=less than high school/drop out; 2=high school graduate; 3=some college; 4=college graduate; 5=in secondary school.

*Child school dropout (CDRPOUTX).* Constructed variable. Based on variable EDUCCT2X: 0=not a dropout; 1=dropout.

*Household income (FAMINC).* Five categories of total family income: 1=\$0-\$8,999; 2=\$9,000-\$19,999; 3=\$20,000-\$39,999; 4=\$40,000-\$74,999; 5=\$75,000+. Available in 1990-1996.

*Region of the country (REGION).* Four categories: 1=Northeast; 2=North Central; 3=South; 4=West.

*Population density (PDEN).* Three categories based on the 1990 Census: 1=segment in an MSA with 1 million or more persons; 2=segment in an MSA with fewer than 1 million persons; 3=segment not in an MSA. Available in 1990-1996.

#### 3.7.d Personal Characteristic Variables

See Technical Appendix, Section A.2.b, for further detail.

*Parent depression in past 12 months (MDE1):* 0=probable non-case; 1=probable case.

*Parent anxiety in past 12 months (GAD1):* 0=probable non-case; 1=probable case.

*Parent and child delinquency in past 12 months (DELQX).* Scores ranged from 0-12. Additive index based on 12 delinquency items. Available in 1991-1994A and 1995.

*Child behavioral problem in past six months (PR\_BEHAV).* Administered only to 12-17 year olds in 1994B-1996: 0=no behavioral problem; 1=behavioral problem. Recoded binary variable derived from 100 items from the Achenbach Youth Checklist (YSR). The *Behavioral Problem Scale* was the summation of the *Delinquent* and *Aggressive Behavior Syndrome* raw scores. For boys a score of 19 and for girls a score of 17 indicated a behavioral problem.

*Child emotional problem in past six months (PR\_EMOT).* Administered only to 12-17 year olds in 1994B-1996: 0=no emotional problem; 1=emotional problem. Recoded binary variable derived from 100 items from the Achenbach Youth Checklist. The *Emotional Problem Scale* was the summation of the *Withdrawn*, *Anxious/Depressed* and *Somatic Complaints Syndrome* raw scores (minus overlap for the unhappy/sad/depressed item). For boys a score of 17 and for girls a score of 22 indicated an emotional problem.

*Parent and child perceived risk of occasional and regular marijuana use (RSKMJOCC and RSKMJRGX).* Recoded variables, three categories: 1=great risk; 2=moderate risk; 3=slight/no risk. Two questions: "How much do you think people risk harming themselves physically and in other ways when (1) they smoke marijuana occasionally (RSKMJOCC); and (2) smoke marijuana regularly (RSKMJREG)?" The original four categories included: 1=no risk; 2=slight risk; 3=moderate risk; 4=great risk. Categories 3 and 4 were combined. Three-category reverse coded versions were created. Available in 1988, 1991-1994 (A and B) and 1995.

Table 3.1. Number of Parent-Child Dyads with Children Aged 12-25<sup>1,2</sup> by Gender of Parent and Child by Survey Year (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Survey Year	N	Parents		Children <sup>2</sup>		Dyad Types							
		Father	Mother	Son	Daughter	Father- Son	Father- %	Father- Daughter	%	Mother- Son	Mother- %		
1979	693	267	426	353	340	164	27.7	103	17.2	189	24.6	237	30.5
1982	371	141	230	197	174	76	23.0	65	19.4	121	29.3	109	28.3
1988	289	70	219	165	124	38	15.8	32	12.5	127	41.9	92	29.8
1990	185	55	130	82	103	24	20.2	31	14.5	58	28.4	72	36.9
Subtotal	1,538	533	1,005	797	741	302	23.4	231	16.5	495	29.4	510	30.6
1991	1,646	541	1,105	840	806	289	18.3	252	21.1	551	31.1	554	29.6
1992	1,869	575	1,294	914	955	293	20.9	282	17.2	621	29.2	673	32.8
1993	1,213	359	854	615	598	190	20.5	169	20.7	425	27.5	429	31.3
1994A	229	69	160	143	86	39	23.5	30	16.3	104	34.8	56	25.4
1994B	880	270	610	440	440	151	22.8	119	16.0	289	30.5	321	30.8
1995	949	270	679	489	460	153	25.3	117	15.6	336	27.3	343	31.8
1996	1,139	305	834	569	570	151	19.4	154	21.3	418	30.7	416	28.6
Subtotal	7,925	2,389	5,536	4,010	3,915	1,266	20.9	1,123	18.6	2,744	29.5	2,792	30.9
Grand Total	9,463	2,389	6,541	4,807	4,656	1,568	22.1	1,354	18.3	3,239	28.8	3,302	30.7

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

## CHAPTER 4: SOCIODEMOGRAPHIC CHARACTERISTICS OF PARENT-CHILD DYADS

Nine demographic characteristics of parents and children were examined: age, sex, ethnicity, education, including child school drop out status, marital status, household income, region of the country and population density. Most findings discussed below are for the aggregated 1979-1996 dyads. In addition, characteristics of respondents included in dyads and of those interviewed as single respondents within a household are presented.

### 4.1 Age

The average age of the children was 15.1 years ( $sd = 2.6$ ). The majority (88.6%) were 12 to 17 years old: 47.3% were 12-14 years old, 41.3% were 15-17 years old, and 11.4% were 18-25 years old (Table 4.1). The detailed distribution of children's ages is presented in Appendix Table A.4.1. Except for survey years prior to 1991, the age distributions were fairly consistent across the waves of dyadic data (Table 4.1 and Appendix Table A.4.1). From 1991 through 1996, children aged 12-17 years old comprised between 81.8% and 94.2% of the child samples. Parents were on average 41.5 years old ( $sd = 7.2$ , range 24-80 years), with fathers about 3 years older than mothers ( $\bar{x} = 43.1$ ,  $sd = 8.6$  and  $\bar{x} = 40.4$ ,  $sd = 6.2$ , respectively,  $p < .001$ ) (Table 4.2). The average ages of parents increased from 39.0 years ( $sd = 6.2$ , range = 24-73 years), when their children were 12-14 years old, to 42.9 years ( $sd = 7.0$ , range = 27-80 years), when their children were aged 15-17 years old, and to 47.1 years ( $sd = 7.5$ , range = 31-74 years), when their children were 18-25 years old.

The average difference in age between parents and children was 26.4 ( $sd = 6.5$ ) years.

### 4.2 Sex

The children were evenly distributed between boys and girls. By contrast, there were fewer father-child (40.4%) than mother-child pairs (59.6%), with 22.1% father-son, 18.3% father-daughter, 28.8% mother-son and 30.7% mother-daughter pairs in the aggregated surveys (Table 3.1). There were slightly more same-sex (52.8%) than cross-sex (47.2%) pairs. The distribution of males and females across the year-specific samples was fairly consistent for both children and parents (Table 4.1 and 4.2). Father-child pairs are underrepresented in the NHSDA. In the U.S. in 1990 and 1993, the ratios of the number of adolescents 12-17 years old living in households with a father over those living with a mother were .82 and .81, respectively (U.S. Census Bureau, 1989-1990; 1993) compared with a ratio of .45 for father-child over mother-child dyads in the 1979-1996 NHSDA. The uneven representation of mothers and fathers in the NHSDA sample reflects the lower participation of males than females in household surveys, including the NHSDA (Section 4.7), and probably introduces an unknown bias in the parental sample.

### **4.3 Ethnicity**

In the total aggregate sample, the ethnic composition was 63.4% white, 20.5% African-American, 14.0% Hispanic and 2.1% other<sup>4</sup> (Table 4.2). However, the ethnic distribution fluctuated from year to year, sometimes dramatically. In 1988 and 1990, the proportions white were extremely low (3.9% and 10.8%, respectively); in 1993 there were many more whites (72.1%) than in 1991 (53.9%) and in 1996 (50.7%).

This year-to-year fluctuation introduces some additional unspecified bias in the sample.

### **4.4 Education**

The majority of the youth sample consisted of 12-17 year old adolescents enrolled in secondary school (84.6%); 5.9% had a high school degree, 5.3% had dropped out of high school, 3.5% had attended some college and .6% had a college degree (Table 4.1). Among the parents, 23.7% did not have a high school degree, 35.7% had a high school degree, 21.6% had attended college, and 19.1% had a college degree or higher education (Table 4.2).

### **4.5 Marital Status**

Seventy-eight percent of the parents were married; 14.0% were divorced or separated (Table 4.2). Almost all (99.1%) the children were unmarried (Table 4.1).

### **4.6 Household Income**

In the aggregate 1990-1996 sample, the annual household income was less than \$9,000 in 8.1% of cases, \$9,000-\$19,999 in 17.4%, \$20,000-\$39,999 in 32.3%, \$40,000-\$74,999 in 31.4%, and more than \$75,000 in 10.8% of cases (Table 4.2).

### **4.7 Dyad and Non-Dyad Respondents Compared**

To assess the impact of non-systematic sampling of multiple household respondents, we compared the sociodemographic characteristics of individuals interviewed as parts of dyads and those interviewed as singletons. The comparison group of non-dyadic adults was restricted to parents. An exact match according to adolescent ages could not be implemented in two early surveys (1979 and 1982) because parents were only asked about 12-17 year old children as a group. Given the small representation of young adults 18-25 in the child sample, the comparison of dyads and non-dyads was done separately for respondents 12-17 and 18-25 years old.

Dyadic and non-dyadic respondents differed on every characteristic, except child sex

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<sup>4</sup> Due to the small number of cases in the "other" ethnic group, it is not considered in the ethnic-specific analyses.

(Table 4.3). The differences were relatively small but highly significant because of the large sample sizes. In particular there were more African-Americans and fewer whites in dyads than in non-dyads ( $p < .001$ ). Among the children, a lower percentage was married among dyads than non-dyads, especially among those 18 to 25 years old. A lower percentage of adolescents had dropped out of school whereas a lower percentage of 18 to 25 year olds were college graduates in the dyads than the non-dyads (Table 4.4).

Parents and children in dyads are not a representative subsample of parents and children interviewed in the NHSDA.

Table 4.1. Sociodemographic Characteristics of Children Aged 12-25<sup>1,2</sup> by Survey Year (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Children's Characteristics	1979-1996 %	1979 %	1982 %	1988 %	1990 %	1991 %	1992 %	1993 %	1994A %	1994B %	1995 %	1996 %
Mean age in years (standard deviation)	15.1 (2.6)	14.4 (1.7)	14.3 (1.7)	14.6 (1.7)	14.3 (1.6)	15.4 (3.0)	15.5 (3.0)	14.7 (2.2)	15.2 (2.5)	15.4 (2.9)	15.1 (2.5)	15.4 (2.9)
<b>Child/Parent Age</b>												
12-14/24-73 years	47.3	50.9	52.8	51.3	58.1	43.9	46.4	49.9	45.1	47.4	44.5	44.8
15-17/27-80 years	41.3	49.1	47.2	48.4	41.9	40.0	35.4	44.3	42.0	33.9	48.1	37.5
18-25/31-74 years	11.4	-	-	.3	-	16.1	18.4	5.6	13.0	18.8	7.4	17.6
<b>Child Sex</b>												
Male	50.9	52.3	52.3	57.7	48.6	49.4	50.1	48.0	58.3	53.3	52.6	50.0
Female	49.1	47.7	47.7	42.3	51.4	50.6	49.9	52.0	41.7	46.7	47.4	50.0
<b>Child Education</b>												
High school dropout	5.3	1.7	2.9	1.6	3.4	6.0	6.7	3.9	11.5	6.4	7.3	6.1
High school graduate	5.9	1.1	2.3	1.5	1.5	7.8	8.1	5.2	6.3	7.9	5.4	8.0
Some college	3.5	.8	-	.5	-	3.2	6.1	1.8	2.1	6.4	1.3	5.5
College graduate	.6	-	-	-	-	.9	1.4	.2	-	.3	.1	1.1
In secondary school:12-17 years	84.6	96.4	94.8	96.4	95.1	82.1	77.7	88.8	80.0	79	85.9	79.2
<b>Child Marital Status</b>												
Married	.5	-	-	-	-	1.2	.5	.1	1.2	1.1	.3	.9
Divorced/separated	.4	-	-	-	-	1.0	.2	.1	.9	.6	.8	.3
Widowed	0	-	-	-	-	-	-	-	-	-	.1	-
Never married	41.4	-	-	47.4	41.9	54.0	52.9	49.8	52.8	51.0	54.4	53.9
Not ascertained <sup>3</sup>	57.8	100.0	100.0	52.6	58.1	43.8	46.4	50.0	45.1	47.4	44.5	44.8
Total N	9,463	693	371	289	185	1,646	1,869	1,213	229	880	949	1,139

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup>Question not asked for respondents aged 12-17 in 1979 and 1982, and aged 12-14 in 1988-1996.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 4.2. Sociodemographic Characteristics of Parents<sup>1,2,3</sup> by Survey Year  
(NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Parents' Characteristics	1979-1996 %	1979 %	1982 %	1988 %	1990 %	1991 %	1992 %	1993 %	1994A %	1994B %	1995 %	1996 %
Mean age in years (standard deviation)	41.5 (7.2)	41.6 (7.3)	41.2 (7.7)	39.6 (7.0)	40.1 (7.7)	41.6 (7.9)	41.5 (7.0)	41.1 (6.2)	40.3 (5.3)	41.7 (6.9)	41.5 (7.3)	41.9 (7.2)
Parent Sex												
Male	40.4	44.9	42.4	28.3	34.7	39.4	38.1	41.2	39.8	38.8	40.9	40.7
Female	59.6	55.1	57.6	71.7	65.3	60.6	61.9	59.0	60.2	61.2	59.1	59.3
Parent Education												
Less than high school	23.7	28.5	22.2	43.2	47.4	25.0	26.1	14.4	14.2	20.2	20.4	24.6
High school graduate	35.7	34.8	38.8	37.6	34.2	40.0	34.8	32.6	37.8	33.7	36.1	36.3
Some college	21.6	21.7	21.7	12.4	10.2	19.0	20.7	25.3	26.4	25.1	20.7	20.7
College graduate	19.1	15.0	17.3	6.8	8.2	15.9	18.5	27.7	21.5	21.0	22.9	18.3
Parent Marital Status												
Married	77.8	86.0	66.9	61.4	77.8	74.0	76.5	82.1	79.5	77.5	76.6	75.4
Divorced/separated	14.0	9.7	1.3	26.0	14.4	17.9	16.0	13.4	16.9	15.1	15.3	14.8
Widowed	4.1	2.8	27.4	3.7	1.2	3.3	3.4	1.2	.8	2.7	2.0	3.4
Never married	4.2	1.5	4.4	8.9	6.6	4.8	4.1	3.3	2.8	4.8	6.1	6.4
Household Income <sup>4</sup>												
\$0-\$8,999	8.1	-	-	-	11.7	8.2	9.8	7.2	8.6	6.3	5.7	7.9
\$9,000-\$19,999	17.4	-	-	-	26.1	19.3	19.6	12.2	16.9	15.0	18.9	16.1
\$20,000-\$39,999	32.3	-	-	-	37.9	35.6	32.2	31.2	27.8	29.9	30.4	33.5
\$40,000-\$74,999	31.4	-	-	-	19.7	28.8	29.4	35.4	30.3	36.0	33.9	30.1
\$75,000+	10.8	-	-	-	4.7	8.0	9.0	13.9	16.5	12.8	11.1	12.4
Parent Ethnicity												
White	63.4	78.1	74.7	3.9	10.8	53.9	60.1	72.1	69.0	65.3	61.7	50.7
African-American	20.5	13.0	14.8	53.1	25.7	23.3	22.4	15.8	16.5	20.3	22.2	28.2
Hispanic	14.0	6.8	8.8	43.0	63.5	20.4	14.4	9.3	13.4	12.8	14.9	20.2
Other	2.1	2.1	1.7	-	-	2.4	3.1	2.8	1.1	1.5	1.2	.9
Region of Country												
West	15.1	14.6	16.6	24.6	34.0	15.7	15.1	14.2	8.3	13.0	15.4	16.7
South	37.4	34.4	32.1	45.8	27.8	47.5	38.4	26.5	33.4	34.4	39.6	42.5
North Central	27.3	24.9	28.3	16.7	22.7	17.7	27.7	36.2	35.1	36.8	27.5	23.6
Northeast	20.3	26.2	23.0	12.9	15.5	19.1	18.8	23.1	23.2	15.8	17.4	17.3
Population Density <sup>5</sup>												
MSA with 1 million+	38.6	-	-	-	51.6	42.9	39.2	42.8	26.0	32.5	32.9	38.6
MSA with < 1 million	31.9	-	-	-	31.2	34.8	30.7	26.9	31.9	35.8	30.5	34.5
Not in MSA	29.6	-	-	-	17.2	22.2	30.0	30.3	42.1	31.7	36.8	26.9
Total N	9,463	693	371	289	185	1,646	1,869	1,213	229	880	949	1,139

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup>NHSDA 1990-1996, N=8,214.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table 4.3. Sociodemographic Characteristics of Parents by Membership in Parent-Child Dyads <sup>1,2</sup> (NHSDA 1979-1996)

Parents' Characteristics	Dyads %	Non-Dyads %
<b>Mean age in years (standard deviation)</b>	41.5 (7.2)	43.7 (7.8)***
<b>Parent Sex</b>		
Male	40.4	44.7 ***
Female	59.6	55.3
<b>Parent Education</b>		
Less than high school	23.7	19.2 ***
High school graduate	35.7	35.2
Some college	21.6	23.4 **
College graduate	19.1	22.2 ***
<b>Parent Marital Status</b>		
Married	77.8	79.0 *
Divorced/separated	14.0	11.6 ***
Widowed	4.1	2.2 ***
Never married	4.2	5.9 ***
<b>Household Income<sup>3</sup></b>		
\$0-\$8,999	8.1	5.2 *
\$9,000-\$19,999	17.4	13.2 ***
\$20,000-\$39,999	32.3	30.2 **
\$40,000-\$74,999	31.4	36.6 ***
\$75,000+	10.8	14.8 ***
<b>Parent Ethnicity</b>		
White	63.4	74.6 ***
African-American	20.5	10.8 ***
Hispanic	14.0	10.5 ***
Other	2.1	4.1 ***
<b>Region of Country</b>		
West	15.1	23.4 ***
South	37.4	36.2
North Central	27.3	22.2 ***
Northeast	20.3	18.3 ***
<b>Population Density<sup>3</sup></b>		
MSA with 1 million+	38.6	45.1 ***
MSA with < 1 million	31.9	32.4
Not in MSA	29.6	22.6 ***
Total N	9,463	9,728

<sup>1</sup> Weighted estimates, unweighted N's.

<sup>2</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup> NHSDA 1990-1996.

\* p<.05, \*\* p<.01, \*\*\*p<.001, T-test for means and Z-test for the percentage difference between dyad and non-dyad parents.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 4.4. Sociodemographic Characteristics of Children Aged 12-25  
by Membership in Parent-Child Dyads <sup>1,2</sup> (NHSDA 1979-1996)

Children's Characteristics	12-17 Year Olds		18-25 Year Olds	
	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %
<b>Mean age in years (standard deviation)</b>	14.4 (1.7)	14.6 (1.6)	20.6 (2.2)	21.5 (2.4)
<b>Child Sex</b>				
Male	51.2	50.9	48.9	49.3
Female	48.8	49.1	51.1	50.7
<b>Child Education</b>				
High school dropout	2.9	4.6 ***	24.2	20.3 **
High school graduate	1.3	3.9 ***	41.8	35.6 ***
Some college	.3	.7 ***	28.4	31.8 *
College graduate	-	-	5.6	12.4 ***
In secondary school: 12-17 years	95.5	90.8 ***	-	-
<b>Child Marital Status</b>				
Married	.2	3.6 ***	3.0	22.6 ***
Divorced/separated	.0	.9 ***	2.9	3.3
Widowed	.0	.2 ***	-	.1
Never married	36.4	41.8 ***	94.1	74.0 ***
Not ascertained <sup>3</sup>	65.2	53.6 ***	-	-
<b>Total N</b>	<b>8,392</b>	<b>37,814</b>	<b>1,071</b>	<b>33,056</b>

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup>Question not asked for respondents aged 12-17 in 1979 and 1982, and aged 12-14 in 1988-1996.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test for means and Z-test for the percentage difference between dyad and non-dyad children.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

## **CHAPTER 5: PREVALENCE AND ASSOCIATION OF MARIJUANA USE AMONG CHILDREN AND PARENTS**

### **5.1 Prevalence of Marijuana Use Among Children and Parents**

Prevalence rates of marijuana use among parents and children in the total dyads and by sociodemographic characteristics are presented as background to the analysis of association in patterns of use within dyads. Data for 12-17 year olds are available in all surveys but only in 1991-1996 for 18-25 year olds. To adjust for the variable age distributions of children in dyads from different surveys, age standardized estimates were calculated separately among 12-17 year olds for 1979-1996 and among 18-25 year olds for 1991-1996 based on the 1991 distribution of child age. Data for the aggregated 1979-1996 surveys are presented in Tables 5.1 and 5.2 and for specific years in Appendix Tables A.5.1 and A.5.2. Use among children and their parents follow well described age, gender and ethnic related patterns.

#### **5.1.a Child Patterns of Marijuana Use**

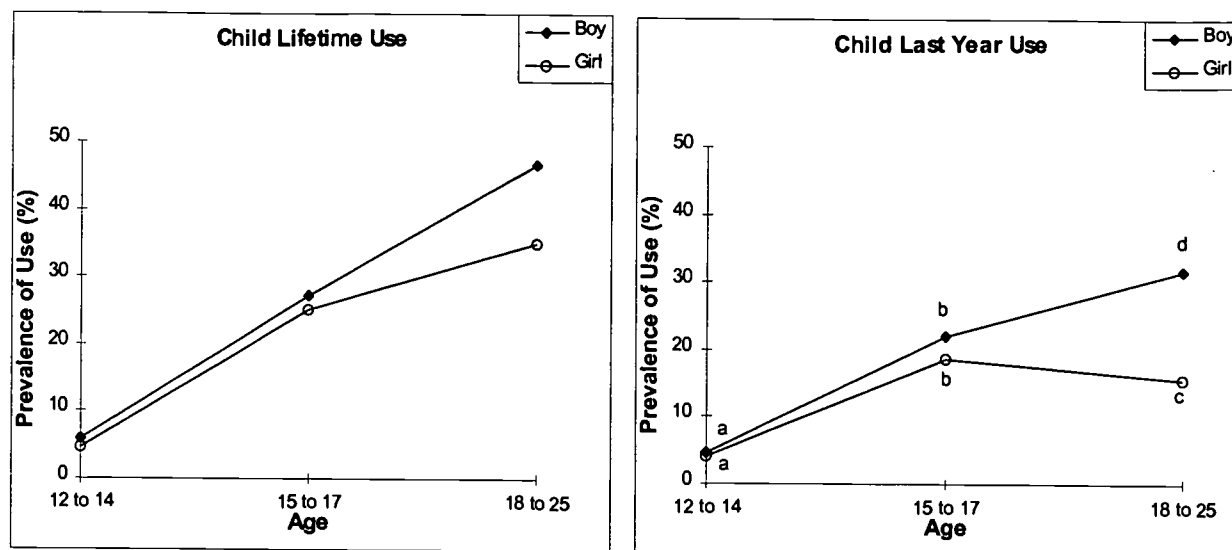
In the 1979-1996 aggregate sample, 15.1% of children aged 12-17 had ever used marijuana and 11.9% had used it in the last year (Table 5.1). In 1991-1996, 10.8% and 8.4% of 12-17 year olds had done so; 40.1% of youths aged 18-25 had used marijuana in their lifetime and 23.7% in the last year.

The increasing rates of use with increasing age followed well documented age related trends. Adolescents were differentiated into two age groups, 12-14 and 15-17 years old. In 1991-1996, there was a five-fold increase in rates of lifetime marijuana use among older adolescents aged 15-17 years (19.2%) compared with younger adolescents aged 12-14 years (3.2%), and a further doubling from ages 15-17 to ages 18-25 (40.1%).

While in the total sample of 12-25 year olds, boys were more likely than girls to use marijuana lifetime and in the last year ( $p < .001$ ), this sex difference did not appear among adolescents aged 12-14 and 15-17 for lifetime and last year use (see Figure 5.1). The interaction term of child age and sex was statistically significant only for last year use (logistic regression,  $p < .05$ ).

There were no statistically significant ethnic differences in rates of lifetime and last year marijuana use in the total sample of youths.

Figure 5.1. Prevalence of Lifetime and Last Year Marijuana Use Among Children Aged 12-25, by Child Age and Sex<sup>1,2</sup> (NHSDA 1979-1996)



<sup>1</sup> Weighted estimates.

<sup>2</sup> SUDAAN PROC LOGISTIC (Wald F-test) was used to test for age and sex differences in lifetime and last year marijuana use.

<sup>a-d</sup> For child last year marijuana use, percentages with different superscripts are significantly different from each other.

### 5.1.b Parental Patterns of Marijuana Use

In the aggregate 1979-1996 sample, 32.8% of parents had ever used marijuana in their lifetime but only 5.3% had used in the last year (Table 5.2). Despite the large number of dyads in the sample, this low prevalence rate resulted in a relatively small number of families (N= 572) in which the parents reported to be still using marijuana within the last year (343 mothers, 229 fathers). Parents who reported using marijuana within the last year preceding the interview reported greater lifetime usage than those who had stopped using marijuana. In the 1979-1994A aggregated surveys, 41.2% of current users reported having ever used marijuana 100+ times compared with 17.7% of former users (Appendix Table A.5.11). Lifetime parental rates increased from 1979 to 1994, peaked at 47.9% in 1994A (36.3% in 1994B), and declined in 1995 and 1996. Parent last year marijuana use remained stable during the 17-year period covered by the surveys (Appendix Table A.5.2). The increase in lifetime prevalence over most of the period covered by the surveys reflects historical changes in rates of marijuana use initiation experienced in their adolescence by parents from different birth cohorts.

Fathers had higher rates of marijuana use than mothers: 38.9% of fathers and 28.7% of mothers reported having used marijuana in their lifetime; 7.1% of fathers and 4.1% of mothers reported using it in the last year ( $p's < .001$ ) (Table 5.2). This pattern was very stable across individual survey years (Appendix Table A.5.2).

Parental lifetime marijuana use decreased with increasing child age as parental age increased.

There were significant ethnic differences in patterns of parental marijuana use. African-American and white parents had higher rates of lifetime marijuana use than Hispanic parents ( $p's < .001$ ); African-American parents had higher rates of last year use than white and Hispanic parents ( $p's < .001$ ) (Table 5.2). The different ethnic patterns observed among children and their parents mirror the epidemiological finding that, in adolescence and early adulthood, whites usually have higher rates of drug use than minorities, while the ethnic patterns reverse beginning in middle adulthood.

### 5.1.c Drug Use Among Respondents in Dyads and Those Not in Dyads

We noted earlier that the dyads in the NHSDA were not selected to constitute a representative sample of parent-child pairs in the United States, and that the sociodemographic characteristics of parents and children in dyads differed somewhat from those not in dyads. Two features of the epidemiology of marijuana use differed in the two groups as well, especially for dyads with the youngest adolescents 12-14 years old.

We compared the rates of self-reported marijuana use by children and parents in dyads with youths of similar ages and parents not included in dyads. The rates of lifetime and past year marijuana use among 12-14 year olds and of lifetime use among 18-25 year olds were generally significantly higher in the non-dyadic sample than in the dyadic sample of children (Table 5.3). Rates of use for parents not in dyads, controlling for child age, were generally the same in dyads and non-dyads. The only statistically significant difference was the higher lifetime rates of parents of 12-14 year olds not in dyads (Table 5.3). Detailed year-specific data are presented in Appendix Tables A.5.3 and A.5.4.

Rates of use over time in the sample of youths in dyads fluctuated more and rates for 18-25 year olds deviated somewhat from historical trends observed among youths in the United States during the same historical period. This can be seen from a comparison of trends in last year prevalence of use among youths aged 12-17 and 18-25 for the total NHSDA (Figure 1.1) and for the dyads (Appendix Figure A.5.1). Rates of marijuana use among 18 to 25 year olds in the dyads started to decline as of 1995 at a time when, in the U.S. as a whole, rates of use in that age group were still increasing.

## 5.2 Association in Marijuana Use Between Parents and Children

The influence of parents on children was inferred from the extent of association in marijuana use between them. As noted earlier, although the data are cross-sectional, we use the term parental influence, since we assume that it is unlikely that parents use marijuana in response to their children's use.

The association between children's and parents' patterns of marijuana use within dyads was estimated by odds ratios between child and parent use. Cross-tabulations for the aggregated 1979-1996 surveys are presented in Table 5.4 and odds ratios in Table 5.5. Cross-tabulations for each of the 10 surveys separately are presented in Appendix Tables A.5.5-A.5.9 (A.5.5 by child age, A.5.6 by child sex, A.5.7 by parent sex, A.5.8 by dyad type, A.5.9 by ethnicity) and odds ratios in Appendix Table A.5.10.

### 5.2.a Cross-Tabulations Between Parent and Child Marijuana Use

*Parental lifetime and last year use.* In a first step, the children's lifetime and last year marijuana use was examined as a function of parental history of marijuana use. There were consistently positive and significant associations between the marijuana behavior of parents and children (Table 5.4). In the total sample of youths aged 12-25, the proportion reporting to have ever used marijuana was more than forty percent higher when parents reported to have ever used marijuana in their lives (22.9%) compared with when parents had never used (15.6%). Rates of last year use by the children were sixty percent higher (17.5% and 11.0%, respectively, in each type of family). When parents reported using marijuana within the last year almost twice as many (21.9%) of the children had also used marijuana in the same period compared with when parents had not used marijuana (12.7%).

Parental lifetime and last year use were considered simultaneously in order to distinguish the influence of former from current use (i.e., use within the last year). In the total sample, the percentages of children using marijuana, whether lifetime or last year, were similar for former and current parental marijuana users and not statistically significantly different from each other (Table 5.4). When the sample was disaggregated by age, however, a difference appeared among the youngest adolescents aged 12-14. There were higher percentages of lifetime and past year users among the children of current than of former marijuana users (differences statistically significant at  $P < .05$ ).

### 5.2.b Measures of Association Between Parent and Child Marijuana Use

The odds ratio, a measure of association that is insensitive to marginal distributions, provides a more appropriate assessment of parent-child association than the percentages of dyad members with similar patterns of use. In a first step, univariate regression models were estimated to predict the child lifetime and last year marijuana use as a function of parental pattern of marijuana use, without control for any other variable. Models were run with different definitions of parental marijuana use: lifetime, last year, combined lifetime-last year (Table 5.5).

The influence of lifetime and last year parental use was similar. The unadjusted odds of children using marijuana ever or within the last year when their parents were lifetime or last year users were almost identical (1.6-1.9). The odds varied slightly from year to year (Appendix Table A.5.10). The highest odds appeared in the very small 1994A sample and reflected imprecision of the estimates. The joint examination of lifetime and last year use confirmed the descriptive finding reported above regarding the relative impact of current versus former parental use on lifetime use by the child. In the total sample, the effects were not significantly different (Table 5.5). Although, compared with never users, last year parental users were more likely ( $OR=2.3$ ,  $p<.001$ ) than former users ( $OR=1.6$ ,  $p<.001$ ) to have a child who reported using marijuana in the last year, the difference between the odds was not statistically significant. As discussed above with respect to rates of use, the patterns changed somewhat by children's age and ethnicity. Among the youngest children and Hispanics, parental current use had a stronger effect than former use (differences in the odds ratios significant at  $p<.01$ ).

Parental influence was apparent for children of all ages (Table 5.5). The odds in the age-specific groups were consistently higher than in the sample as a whole, reflecting the association of child age with levels of marijuana use. The association of parental lifetime use with child lifetime use was significantly higher for the oldest children than the two younger groups ( $p<.05$ ; Wald test); the association of parental last year use with child lifetime use was significantly higher both for the oldest and youngest offspring than those 15-17 years old ( $p's<.05$ ; Wald test). Parental influence displays a curvilinear pattern, declining throughout adolescence and increasing among young adults aged 18 to 25. This probably reflects the closeness and dependence on parents of these older youths who are still living at home, although some are married.

The association of children's marijuana use with mothers was stronger than with fathers, especially when the parent was still using marijuana within the last year preceding the interview (Table 5.5). However, the differences were not statistically significant.

Parental lifetime marijuana use had statistically significant and similar associations with boys' and girls' lifetime and last year use (Table 5.5). Parental use in the last year, however, was significantly associated with the lifetime and last year use of sons only ( $ORs=2.3, 2.2$   $p's<.001$ ), but the differences between boys and girls were not significant.



Trends appeared in same- and cross-sex patterns of association between parents and children, but they were not statistically significant (Table 5.5). When fathers smoked, the odds of smoking by children were elevated only among sons; when mothers smoked, the odds were elevated among sons and daughters. For example, when fathers used marijuana in the last year, sons were more than twice as likely to use marijuana both in their lifetime and in the last year (ORs=2.1 and 2.0,  $p$ 's <.05) while daughters were not (OR=1.1). When mothers used marijuana in the last year, the odds ratios for sons' and daughters' last year use were 2.5 ( $p$ <.01) and 2.0 ( $p$ <.05), respectively. However, the three-way interactions between parent sex, child sex and parent marijuana use on child marijuana were not statistically significant (data not presented). Consequently, all multivariate analyses were implemented without differentiating parents and children by gender.

Across ethnic groups, parental lifetime marijuana use was positively and significantly associated with child lifetime and last year marijuana use (Table 5.5). Ethnic differences in patterns of association appeared only with respect to parental last year use. The association of parental last year marijuana use with child lifetime and last year marijuana use was higher among Hispanics (ORs=3.3, 4.6,  $p$ 's <.001) than whites (ORs=1.7, 1.8,  $p$ 's <.05) and African-Americans (OR = 1.5, ns; 1.7,  $p$  <.05). The unadjusted odds ratios of parental last year marijuana use on child marijuana use among Hispanics were slightly more than twice those of whites and African-Americans for lifetime use and almost three times those for last year use ( $p$ 's <.05; Wald test). However, the ethnic differences become non-significant with control for sociodemographic covariates (see Chapter 6).

### 5.2.c Extensiveness of Parental Marijuana Use and Child Marijuana Use

Three measures of parental extensiveness of marijuana use were available: total number of days (or times) used lifetime, past year and past month. Because of the relatively small number of parents who were using within the past month, the analysis of children's marijuana use as a function of the extensiveness of very recent parental use could only be exploratory.

The format of the frequency of lifetime use varied across survey years. In particular, the highest number of days used was expanded from a maximum of 100+ to 200+ and then to 300+ (see Technical Appendix). Since children's use did not vary as a function of these three categories (Table A.5.12), a four-category variable was used across the 10 surveys, where 100+ was the highest category. Percentages of children's using marijuana as a function of extensiveness of parental use and odds ratios are displayed in Table 5.6. There is a slight trend for the percentages of marijuana using children to increase as a function of extensiveness of parental use. However, none of the differences were statistically significant. There were no significant variations in children's lifetime or last year use by extensiveness of parental use. The high odds observed for the missing category among parents who used marijuana in the last year remains to be explained, especially since these missing cases were structurally missing and did not reflect any self-selection bias on the part of participants in the survey.



While we expected parental influence to vary as a function of recency and extensiveness of use, no such effects were found. Overall parental influence is moderate. As will be seen in the next chapter, the odds between parental and child marijuana use increase when other factors are controlled, in particular child and parent age.

Table 5.1. Prevalence of Child Lifetime and Last Year Marijuana Use Among Children Aged 12-25<sup>1,2</sup> in Parent-Child Dyads, by Child Age, Sex and Ethnicity (NHSDA 1979-1996)

	1979- 1996 %	1979-1990 %	1991-1996 %
<b>Lifetime Use</b>			
<b>Child Age<sup>3</sup></b>			
12-14 years	5.4 <sup>a</sup>	11.9 <sup>a</sup>	3.2 <sup>a</sup>
15-17 years	26.7 <sup>b</sup>	44.1 <sup>b</sup>	19.2 <sup>b</sup>
18-25 years <sup>4</sup>	40.1	-	40.1
12-17 years	15.1	27.3	10.8
<b>Child Sex</b>			
Male	19.4 <sup>a</sup>	27.8	16.8 <sup>a</sup>
Female	16.5 <sup>b</sup>	27.2	13.6 <sup>b</sup>
<b>Child Ethnicity</b>			
White	18.8	28.7	15.3
African-American	16.4	25.3	14.6
Hispanic	17.0	19.8	16.5
<b>Last Year Use</b>			
<b>Child Age<sup>3</sup></b>			
12-14 years	4.4 <sup>a</sup>	9.7 <sup>a</sup>	2.7 <sup>a</sup>
15-17 years	20.8 <sup>b</sup>	35.1 <sup>b</sup>	14.7 <sup>b</sup>
18-25 years <sup>4</sup>	23.7	-	23.7
12-17 years	11.9	21.8	8.4
<b>Child Sex</b>			
Male	14.9 <sup>a</sup>	22.2	12.6 <sup>a</sup>
Female	11.4 <sup>b</sup>	21.8	8.5 <sup>b</sup>
<b>Child Ethnicity</b>			
White	13.9	22.9	10.7
African-American	12.1	21.0	10.3
Hispanic	11.9	15.9	11.2
<b>Total N</b>	<b>9,463</b>	<b>1,538</b>	<b>7,925</b>

<sup>1</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>2</sup> For 1979, 1982, 1988 and 1990, children aged 12-17 were selected. For all other years, children aged 12-25 were selected.

<sup>3</sup> Adjusted estimates based on the 1991 distribution of child age for 12-17 and 18-25 year olds.

<sup>4</sup> NHSDA 1991-1996.

<sup>a-b</sup> For each sample and each sociodemographic variable, percentages with different superscripts are significantly different from each other, T-test (p<.05).

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.2. Prevalence of Parent Lifetime and Last Year Marijuana Use in Parent-Child Dyads, by Child/Parent Age, Sex and Ethnicity<sup>1,2</sup> (NHSDA 1979-1996)

	1979-1996 %	1979-1990 %	1991-1996 %
<b>Lifetime Use</b>			
<b>Total Parents</b>	32.8	17.8	37.2
<b>Child/Parent Age</b>			
12-14/24-73 years	37.5 <sup>a</sup>	23.2 <sup>a</sup>	42.2 <sup>a</sup>
15-17/27-80 years	29.8 <sup>b</sup>	12.2 <sup>b</sup>	36.2 <sup>b</sup>
18-25/31-74 years	24.2 <sup>c</sup>	-	24.2 <sup>c</sup>
<b>Parent Sex</b>			
Male	38.9 <sup>a</sup>	20.9	44.7 <sup>a</sup>
Female	28.7 <sup>b</sup>	15.4	32.3 <sup>b</sup>
<b>Parent Ethnicity</b>			
White	34.7 <sup>a</sup>	16.3 <sup>a</sup>	41.2 <sup>a</sup>
African-American	37.3 <sup>a</sup>	31.6 <sup>b</sup>	38.5 <sup>a</sup>
Hispanic	20.5 <sup>b</sup>	8.3 <sup>c</sup>	22.7 <sup>b</sup>
<b>Last Year Use</b>			
<b>Total Parents</b>	5.3	6.9	4.8
<b>Child/Parent Age</b>			
12-14/24-73 years	7.0 <sup>a</sup>	9.7 <sup>a</sup>	6.1 <sup>a</sup>
15-17/27-80 years	3.9 <sup>b</sup>	3.8 <sup>b</sup>	3.9 <sup>b</sup>
18-25/31-74 years	3.2 <sup>b</sup>	-	3.2 <sup>b</sup>
<b>Parent Sex</b>			
Male	7.1 <sup>a</sup>	8.7	6.6 <sup>a</sup>
Female	4.1 <sup>b</sup>	5.5	3.7 <sup>b</sup>
<b>Parent Ethnicity</b>			
White	4.8 <sup>a</sup>	5.6 <sup>a</sup>	4.5 <sup>a</sup>
African-American	8.5 <sup>b</sup>	15.1 <sup>b</sup>	7.1 <sup>b</sup>
Hispanic	3.5 <sup>a</sup>	4.1 <sup>a</sup>	3.5 <sup>a</sup>
<b>Total N</b>	9,463	1,538	7,925

<sup>1</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>2</sup> For 1979, 1982, 1988 and 1990, children aged 12-17 were selected. For all other years, children aged 12-25 were selected.

<sup>a-c</sup> For each sample and each sociodemographic variable, percentages with different superscripts are significantly different from each other, T-test (p<.05).

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.3. Prevalence of Parent and Child Lifetime and Last Year Marijuana Use Among Parents and Children Aged 12-25 by Membership in Parent-Child Dyads<sup>1,2</sup> (NHSDA 1979-1996)

	Children		Parents	
	Dyads <sup>3</sup> %	Non-Dyads %	Dyads <sup>3</sup> %	Non-Dyads %
<b>Lifetime Use</b>				
<b>Child/Parent Age<sup>4,5</sup></b>				
12-14/24-87years	5.4	6.8 ***	37.5	44.6 ***
15-17/26-80 years	26.7	26.8	29.8	38.2
18-25/26-74 years	40.1	45.4 ***	24.2	24.8
12-17/24-87 years	15.1	17.1 ***	36.5	39.9
<b>Last Year Use</b>				
<b>Child/Parent Age<sup>4,5</sup></b>				
12-14/24-87years	4.4	5.5 **	7.0	6.8
15-17/26-80 years	20.8	21.3	3.9	4.4
18-25/26-74 years	23.7	23.0	3.2	2.6
12-17/24-87 years	11.9	13.6	5.6	5.8
<b>Age Specific N's<sup>4,5</sup></b>				
12-14/24-87years	4,794	18,295	4,223	3,078
15-17/26-80 years	3,598	19,519	3,105	2,779
18-25/26-74 years	1,070	33,056	1,070	3,645
12-17/24-87 years	8,392	37,814	8,392	6,083
<b>Total N<sup>5</sup></b>	9,462	70,870	9,462	9,728

<sup>1</sup> Weighted estimates, unweighted N's.

<sup>2</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup> For parent-child dyads, adjusted estimates based on the 1991 distribution of child age for 12-17 and 18-25 year olds.

<sup>4</sup> Age ranges for dyad parents are 24-73, 27-80 and 31-74; and for non-dyad parents 26-87, 26-71 and 26-71, for children aged 12-14, 15-17 and 18-25, respectively.

<sup>5</sup> Differentiation of children aged 12-14 and 15-17 not available for non-dyad parents in 1979 and 1982.

Estimates of dyad and non-dyad parental marijuana use for 12-14 and 15-17 year olds excludes the 1979 and 1982 surveys; estimates for 12-17 year olds includes all survey years. Data for 18-25 year olds available in NHSDA 1991-1996.

\* p<.05; \*\* p<.01; \*\*\*p<.001, Z-test of the percentage difference between dyad and non-dyad parents and children.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.4. Lifetime and Last Year Marijuana Use Among Children Aged 12-25<sup>1,2</sup>  
by Parent Pattern of Use and Child Age (NHSDA 1979-1996)

Child Marijuana Use	Parent Marijuana Use						
	Lifetime		Last Year		Current		
	No %	Yes %	No %	Yes %	Never %	Former %	Last Year %
<b>Total</b>							
Lifetime	15.6	22.9 ***	17.5	26.9 **	15.6 <sup>a</sup>	22.2 <sup>b</sup>	26.9 *** <sub>b</sub>
Last Year	11.0	17.5 ***	12.7	21.9 **	11.0 <sup>a</sup>	16.7 <sup>b</sup>	21.9 *** <sub>b</sub>
N	6,379	3,084	8,891	572	6,379	2,512	572
<b>Children Aged</b>							
<b>12-14 years</b>							
Lifetime	3.5	8.3 ***	4.5	15.6 **	3.5 <sup>a</sup>	6.6 <sup>b</sup>	15.6 *** <sub>c</sub>
Last Year	2.9	6.8 ***	3.7	12.8 **	2.9 <sup>a</sup>	5.4 <sup>b</sup>	12.8 *** <sub>c</sub>
N	3,020	1,774	4,443	351	3,020	1,423	351
<b>15-17 years</b>							
Lifetime	22.5	35.1 ***	25.8	38.0 *	22.5 <sup>a</sup>	34.7 <sup>b</sup>	38.0 *** <sub>b</sub>
Last Year	17.1	28.2 ***	19.9	33.2 *	17.1 <sup>a</sup>	27.4 <sup>b</sup>	33.2 *** <sub>b</sub>
N	2,529	1,069	3,410	188	2,529	881	188
<b>18-25 years<sup>3</sup></b>							
Lifetime	33.5	63.0 ***	39.3	80.4 *	33.5 <sup>a</sup>	60.3 <sup>b</sup>	80.4 *** <sub>b</sub>
Last Year	18.5	38.9 ***	22.4	54.5	18.5 <sup>a</sup>	36.5 <sup>b</sup>	54.5 ** <sub>b</sub>
N	830	241	1,038	33	830	208	33

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

<sup>a-c</sup> Comparisons across categories of use for each pattern of use: percentages with different superscripts are significantly different from each other, Wald F-test ( $p \leq .05$ ). \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.5. Association in Marijuana Use Between Parents and Children Aged 12-25<sup>1</sup>, by Child Age, Sex, Ethnicity, Parent Sex and Parent-Child Dyad Type, Unadjusted Odds Ratios<sup>2</sup> (NHSDA 1979-1996)

Child Marijuana Use	N	Parent Lifetime Marijuana Use			
		Child Lifetime	(95% CI)	Child Last Year	(95% CI)
<b>Total</b>	9,463	1.6 ***	(1.4-1.9)	1.7 ***	(1.4-2.1)
<b>Children Aged</b>					
12-14 years	4,794	2.5 ***	(1.7-3.7) ab	2.4 ***	(1.5-3.8)
15-17 years	3,598	1.9 ***	(1.5-2.4) a	1.9 ***	(1.5-2.5)
18-25 years <sup>3</sup>	1,071	3.4 ***	(2.2-5.2) b	2.8 ***	(1.7-4.6)
<b>Child Sex</b>					
Son	4,807	1.6 ***	(1.3-2.0)	1.7 ***	(1.3-2.2)
Daughter	4,656	1.7 ***	(1.3-2.1)	1.8 ***	(1.3-2.3)
<b>Parent Sex</b>					
Father	2,922	1.5 **	(1.1-2.1)	1.5 *	(1.0-2.0)
Mother	6,541	1.7 ***	(1.4-2.1)	2.0 ***	(1.6-2.4)
<b>Parent-Child Dyad Type</b>					
Father-Son	1,568	1.6 *	(1.1-2.4)	1.7 *	(1.1-2.5)
Father-Daughter	1,354	1.4 *	(.9-2.3)	1.3	(.7-2.3)
Mother-Son	3,239	1.5 **	(1.2-2.0)	1.7 ***	(1.3-2.4)
Mother-Daughter	3,302	1.9 ***	(1.4-2.6)	2.2 ***	(1.6-3.1)
<b>Ethnicity</b>					
White	3,509	1.6 ***	(1.3-2.0)	1.7 ***	(1.4-2.2)
African-American	2,814	1.5 *	(1.1-2.1)	1.4	(.9-2.1)
Hispanic	2,996	1.9 ***	(1.4-2.7)	2.1 ***	(1.4-3.0)

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

<sup>a-b</sup> For parent lifetime and last year marijuana use, comparisons across categories for each variable: odds ratios with different superscripts are significantly different from each other, Wald test ( $p < .05$ ).

<sup>d</sup> For parent former/last year use, comparisons between former and last year users within each category for each variable: odds ratios are significantly different from each other, Wald F-test ( $p < .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.5. (Cont'd) Association in Marijuana Use Between Parents and Children Aged 12-25<sup>1</sup>, by Child Age, Sex, Ethnicity, Parent Sex and Parent-Child Dyad Type, Unadjusted Odds Ratios<sup>2</sup> (NHSDA 1979-1996)

Child Marijuana Use	Parent Last Year Marijuana Use			
	Child Lifetime	(95% CI)	Child Last Year	(95% CI)
<b>Total</b>	1.7 ***	(1.3-2.4)	1.9 ***	(1.4-2.7)
<b>Children Aged</b>				
12-14 years	3.9 ***	(2.3-6.6) <sup>a</sup>	3.8 ***	(2.3-6.4)
15-17 years	1.8 *	(1.1-3.0) <sup>b</sup>	2.0 *	(1.2-3.5)
18-25 years <sup>3</sup>	6.3 ***	(2.4-16.9) <sup>a</sup>	4.2 **	(1.4-11.9)
<b>Child Sex</b>				
Son	2.3 ***	(1.5-3.5)	2.2 ***	(1.4-3.5)
Daughter	1.1	(.7-1.8)	1.5	(.9-2.6)
<b>Parent Sex</b>				
Father	1.5	(.9-2.6)	1.7	(.9-2.9)
Mother	2.0 ***	(1.4-2.9)	2.3 ***	(1.5-3.3)
<b>Parent-Child Dyad Type</b>				
Father-Son	2.1 *	(1.1-3.9) <sup>a</sup>	2.0 *	(1.1-3.9)
Father-Daughter	.7	(.3-1.6) <sup>b</sup>	1.1	(.5-2.5)
Mother-Son	2.5 ***	(1.5-4.2) <sup>a</sup>	2.5 **	(1.4-4.2)
Mother-Daughter	1.6	(.9-2.9) <sup>ab</sup>	2.0 *	(1.0-4.0)
<b>Ethnicity</b>				
White	1.7 *	(1.0-2.7)	1.8 *	(1.1-3.0) <sup>a</sup>
African-American	1.5	(1.0-2.5)	1.7 *	(1.0-2.8) <sup>a</sup>
Hispanic	3.3 ***	(1.8-6.2)	4.6 ***	(2.4-8.8) <sup>b</sup>

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

<sup>a-b</sup>For parent lifetime and last year marijuana use, comparisons across categories for each variable: odds ratios with different superscripts are significantly different from each other, Wald test ( $p < .05$ ).

<sup>d</sup>For parent former/last year use, comparisons between former and last year users within each category for each variable: odds ratios are significantly different from each other, Wald F-test ( $p < .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.5. (Cont'd) Association in Marijuana Use Between Parents and Children Aged 12-25<sup>1</sup>, by Child Age, Sex, Ethnicity, Parent Sex and Parent-Child Dyad Type, Unadjusted Odds Ratios<sup>2</sup> (NHSDA 1979-1996)

Child Marijuana Use	Parent Marijuana Use			
	Parent Former		Parent Last Year	
	Child Lifetime	(95% CI)	Child Lifetime	(95% CI)
<b>Total</b>	1.6 ***	(1.3-1.9)	2.0 ***	(1.5-2.7)
<b>Children Aged</b>				
12-14 years	1.9 **	(1.2-3.1)	5.1 ***	(2.9-8.8) <sup>d</sup>
15-17 years	1.8 ***	(1.4-2.4)	2.1 **	(1.3-3.6)
18-25 years <sup>3</sup>	3.0 ***	(1.9-4.8)	8.2 ***	(3.1-21.8)
<b>Child Sex</b>				
Son	1.4 *	(1.1-1.8)	2.6 ***	(1.7-3.9) <sup>d</sup>
Daughter	1.7 ***	(1.3-2.2)	1.4	(.8-2.2)
<b>Parent Sex</b>				
Father	1.5 *	(1.0-2.1)	1.7 *	(1.0-3.0)
Mother	1.6 ***	(1.3-2.1)	2.4 ***	(1.6-3.4)
<b>Parent-Child Dyad Type</b>				
Father-Son	1.5	(.9-2.3)	2.4 **	(1.3-4.5)
Father-Daughter	1.5	(.9-2.5)	.8	(.4-2.0)
Mother-Son	1.4	(1.0-1.9)	2.7 ***	(1.6-4.6) <sup>d</sup>
Mother-Daughter	1.9 ***	(1.4-2.7)	2.0 *	(1.1-3.6)
<b>Ethnicity</b>				
White	1.5 **	(1.2-2.0)	1.9 **	(1.2-3.1)
African-American	1.4	(1.0-2.1)	1.7 *	(1.1-2.8)
Hispanic	1.7 **	(1.2-2.4)	3.7 ***	(1.9-6.9) <sup>d</sup>

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

<sup>a,b</sup>For parent lifetime and last year marijuana use, comparisons across categories for each variable: odds ratios with different superscripts are significantly different from each other, Wald test (p<.05).

<sup>d</sup>For parent former/last year use, comparisons between former and last year users within each category for each variable: odds ratios are significantly different from each other, Wald F-test (p<.05).

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table 5.5. (Cont'd) Association in Marijuana Use Between Parents and Children Aged 12-25<sup>1</sup>, by Child Age, Sex, Ethnicity, Parent Sex and Parent-Child Dyad Type, Unadjusted Odds Ratios<sup>2</sup> (NHSDA 1979-1996)

Child Marijuana Use	Parent Former Use		Parent Last Year Use	
	Child Last Year	(95% CI)	Child Last Year	(95% CI)
<b>Total</b>	1.6 ***	(1.3-2.0)	2.3 ***	(1.6-3.2)
<b>Children Aged</b>				
12-14 years	1.9 *	(1.1-3.2)	4.9 ***	(2.8-8.4) <sup>d</sup>
15-17 years	1.8 ***	(1.4-2.4)	2.4 **	(1.4-4.2)
18-25 years <sup>3</sup>	2.5 ***	(1.5-4.3)	5.2 **	(1.8-15.3)
<b>Child Sex</b>				
Son	1.5 **	(1.1-2.1)	2.5 ***	(1.6-4.0)
Daughter	1.7 ***	(1.3-2.3)	1.9 *	(1.1-3.2)
<b>Parent Sex</b>				
Father	1.4	(.9-2.0)	1.9 *	(1.1-3.3)
Mother	1.8 ***	(1.4-2.4)	2.7 ***	(1.8-4.0)
<b>Parent-Child Dyad Type</b>				
Father-Son	1.5	(.9-2.4)	2.3 *	(1.2-4.5)
Father-Daughter	1.3	(.7-2.4)	1.2	(.5-2.9)
Mother-Son	1.6 *	(1.1-2.3)	2.8 ***	(1.6-4.8)
Mother-Daughter	2.2 ***	(1.3-5.2)	2.6 **	(1.3--5.2)
<b>Ethnicity</b>				
White	1.6 ***	(1.3-2.2)	2.2 **	(1.3-3.6)
African-American	1.3	(.8-2.0)	1.8 *	(1.1-3.1)
Hispanic	1.6 *	(1.1-2.3)	5.0 ***	(2.6-9.8) <sup>d</sup>

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

<sup>a-b</sup> For parent lifetime and last year marijuana use, comparisons across categories for each variable: odds ratios with different superscripts are significantly different from each other, Wald test ( $p < .05$ ).

<sup>d</sup> For parent former/last year use, comparisons between former and last year users within each category for each variable: odds ratios are significantly different from each other, Wald F-test ( $p < .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 5.6. Child Lifetime and Last Year Marijuana Use by Extensiveness of Parent Marijuana Use Among Parent-Child Dyads, Children Aged 12-25<sup>1,2</sup> (NHSDA 1979-1996)

		Child Marijuana Use					
Parent Marijuana Use	N	Lifetime			Last Year		
		%	OR	(95% CI)	%	OR	(95% CI)
Lifetime frequency (vs. never)							
Never	6,379	15.6 <sup>a</sup>	-		11.0 <sup>a</sup>	-	
1-10 times	1,718	22.5 <sup>b</sup>	1.6 ***	(1.3-2.0)	16.6 <sup>b</sup>	1.6 ***	(1.3-2.0)
11-99 times	634	24.2 <sup>b</sup>	1.7 **	(1.2-2.4)	19.1 <sup>b</sup>	1.9 ***	(1.3-2.7)
100+ times	701	22.8 <sup>b</sup>	1.6 ***	(1.2-2.1)	18.4 <sup>b</sup>	1.8 ***	(1.3-2.5)
Missing <sup>3</sup>	31	16.2	1.1	(.3-4.0)	16.2	1.6	(.4-6.0)
Past year frequency (vs. never)							
Never	6,379	15.6 <sup>a</sup>	-		11.0 <sup>a</sup>	-	
Former, not past year	2,512	22.2 <sup>b</sup>	1.6 ***	(1.3-1.9)	16.7 <sup>b</sup>	1.6 ***	(1.3-2.0)
1-200 days/year	439	21.2 <sup>b</sup>	1.5 *	(1.0-2.1)	17.3 <sup>b</sup>	1.7 *	(1.1-2.5)
201 days+/year	61	29.7 <sup>b</sup>	2.3 *	(1.0-5.1)	20.4 <sup>ab</sup>	2.1	(.9-4.7)
Not ascertained <sup>4</sup>	72	39.6	3.6 ***	(2.0-6.3)	33.1	4.0 ***	(2.2-7.1)
Past month frequency (vs. never)							
Never	6,379	15.6 <sup>a</sup>	-		11.0 <sup>a</sup>	-	
Former, not past month	2,789	22.8 <sup>b</sup>	1.6 ***	(1.3-1.9)	17.2 <sup>b</sup>	1.7 ***	(1.4-2.0)
1-20 days/month	217	24.6 <sup>b</sup>	1.8 *	(1.1-2.8)	21.6 <sup>b</sup>	2.2 **	(1.4-3.6)
21-30 days/month	36	36.5 <sup>b</sup>	3.1 *	(1.1-8.8)	36.5 <sup>b</sup>	4.6 **	(1.7-13.0)
Missing <sup>3</sup>	42	14.4	.9	(.3-2.9)	6.7	.6	(.2-1.9)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. UOR=Unadjusted odds ratios.

<sup>3</sup> Respondents were asked but did not report their frequency of marijuana use.

<sup>4</sup> Frequency of use not ascertained in the 1979 and 1982 surveys.

<sup>a,b</sup> Comparisons across categories of use for each pattern of use: percentages with different superscripts are significantly different from each other, Wald F-test ( $p \leq .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

## **CHAPTER 6: PARENTAL MARIJUANA USE AND OTHER PREDICTORS OF MARIJUANA USE AMONG CHILDREN**

### **6.1 Introduction**

Three analyses were implemented to examine the nature of parental influences on their children's marijuana use. The first analysis investigated the effect of parental membership in the baby boom generation on offspring marijuana use. Two additional multivariate analyses investigated the influence of parental marijuana use on the drug use of their children, controlling for other covariates, and identified other significant predictors of child marijuana use. One set of analyses examined the effects of parent and child characteristics in logistic regression models. The final set of analyses estimated structural equation models to specify the direct and indirect paths of selected parental and child variables on child marijuana use.

### **6.2 Parental Exposure to the Marijuana Epidemic**

A basic question underlying this research was to what extent did parental membership in the baby boom generation account for the sharp increase in the prevalence of marijuana use observed among adolescents in the 1990s. To answer this question, we developed a typology of differential parental exposure to the marijuana epidemic that took into account exposure to different incidence and prevalence rates in late adolescence. As described in Chapter 2, we identified five historical periods of the marijuana epidemic and nine different types of exposure among the parental cohorts. These exposure types classified parental birth cohorts according to exposure to these five periods, i.e., whether parents spent their adolescent years in historical periods prior to or after the marijuana epidemic or in periods characterized by different combinations of low or high incidence and prevalence rates. Because of the very small sample size in exposure type #9, groups #8 and #9 were combined. Offspring marijuana use was examined as a function of parental membership in cohort types and parental drug use.

Since rates of marijuana use vary with age, descriptive data about the ages and rates of parental and children use in the eight cohorts types are presented in Table 6.1. Parent age ranged from a mean of 47.3 years to a mean of 28.5 years across the cohorts, and child age ranged from a mean of 15.8 to a mean of 12.8 years. Parental lifetime prevalence of use was very low in the oldest cohorts, increased sharply in the second oldest cohorts, who reached adolescence prior to the marijuana epidemic and in a period of low incidence; prevalence rates increased gradually in successive cohorts, peaked in the cohorts that experienced both high incidence and high prevalence, and declined gradually thereafter. By contrast, the rates of parental last year use increased gradually in the first six cohorts and stabilized in the two youngest cohorts. The rates of lifetime and last year used among the children decreased across the eight parental cohorts, in part because the children were younger.

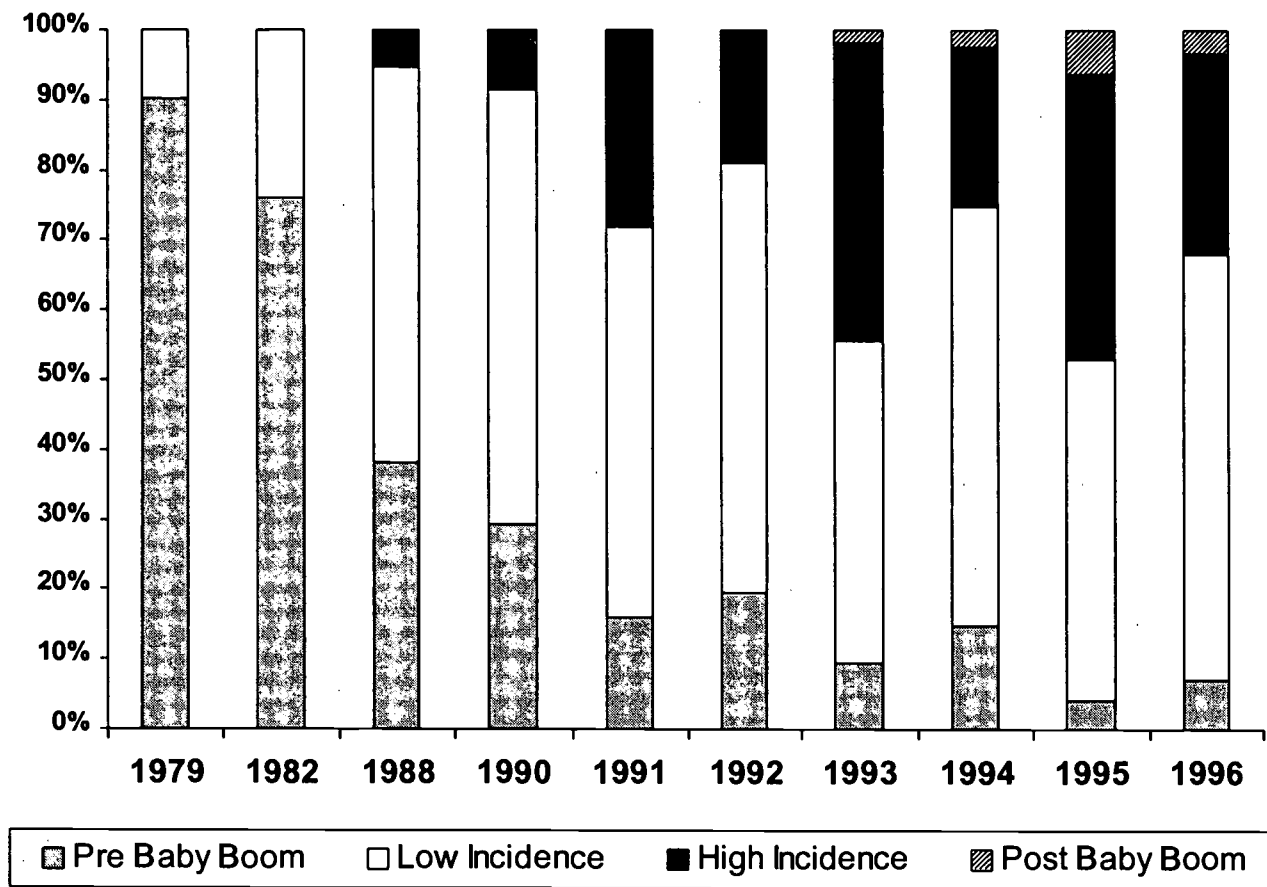
We examined the four associations between parental lifetime and last year use with child lifetime and last year use. The association between parent last year use and child lifetime use was examined to assess whether parents who continued to use marijuana in their thirties, at a time when the majority of users have stopped using, would have a greater impact on their children than parents who were no longer using marijuana. Unadjusted odds ratios and odds ratios adjusted for parent and child age are presented for the four combinations of parent and child lifetime and last year marijuana use in Table 6.2. The odds of child lifetime and last year use were more likely to be statistically significant for parental lifetime than last year use, and for older than younger cohorts. The odds for the aggregated baby boom cohorts (#2-#7) were not significantly different from those for the pre-baby boom generation cohorts (#1). We also examined the differences for all the pair-wise comparisons among the cohorts. There were variations among cohorts within the baby boom generation. In three of the four combinations of parent and child use the odds for the four oldest cohorts (#1-#4), including the pre-baby boom cohort, were higher and significantly different from those in the younger cohorts (#5, #6 or #7). The exception was parental lifetime use on child last year use. Cohorts could be classified into two groups: cohorts in the pre-baby boom and early periods of the baby boom generation, showing higher levels of parental influence; cohorts in the late phase of the baby boom and post baby boom, showing lower levels of influence. The difference between the two groups of aggregated cohorts was significant for parent last year use on child lifetime use. Unexpectedly, the odds were significantly lower among parents who experienced high incidence (Group #5) or a combination of high incidence and high prevalence in their adolescence (Group #6) than among preceding cohorts. We expected parents who spent their adolescence in the period of greatest exposure to marijuana use incidence and prevalence to have the strongest influence on their children. Differential censoring in children's opportunities to initiate marijuana use across parental birth cohorts could partially explain these results. Parental birth cohorts who experienced both high incidence and prevalence (1960-62) were among the youngest in the sample ( $\bar{x}$  age = 32.5 years) and therefore had younger children ( $\bar{x}$  age = 13.6 years) than earlier parental birth cohorts (child  $\bar{x}$  age range from 14.2 to 15.8 years). The youngest adolescents were even less likely than the older ones to have gone through the entire period of risk for initiation of marijuana use.

In a final test of the baby boom hypothesis, we examined the effect of the interactions between birth cohort and parent lifetime (Table 6.3) and last year (Table 6.4) marijuana use on the child marijuana use. This provided a more definitive test of whether, given a specific type of parental marijuana use history, parents from different birth cohorts would have differential influence on their children. The interaction term was significant only for parental last year use on child lifetime use ( $p < .03$ ) (Table 6.4). This significant interaction effect reflected the cohort specific patterns described above, in which the highest similarity between parent and child was observed for the three oldest birth cohorts (1946-1956).

A major hypothesis of the study was not confirmed. Parental membership in the baby boom generation did not appear to account for the differential rates of children's marijuana use, even though parents born between the years 1946 and 1964 used marijuana at higher rates than parents born before 1946 or born after 1963. Association in marijuana use between parents and children did not vary according to parental membership in the baby boom cohorts, who experienced different periods of low and high marijuana use prevalence or incidence in their youth. There was no effect of parental birth cohort with control for ages of child and parent and for the relationship of marijuana use in the cohorts. [Footnote #1]. Furthermore rates of use among children of parents born between 1946 and 1964 were lower than for parents born before 1946; and rates of use among children of parents born between 1946 and 1964 were similar to those of parents born after 1964. The lack of effect of parental membership in baby boom cohorts on children's marijuana use is illustrated in Figures 6.1 and 6.2. Figure 6.1 shows the distribution of birth cohorts among parents of children aged 12-17 in NHSDA surveys from 1979 to 1996 by the level of marijuana use incidence parents experienced in their youth. Parents who experienced high incidence of marijuana use constituted an increasingly larger proportion of parents in the years 1991-1996. However, as shown in Figure 6.2 marijuana use among parents and adolescents diverged and were mirror images of each other in that same period. Lifetime marijuana use rates among parents of youths and young adults approximately doubled from 1979 to 1994, reflecting the increasing dominance of the baby boom cohorts among parents. However, most of this increase occurred during the 1980's, a period in which youth and young adult drug use rates were declining. During the period of rapid increase in youth marijuana use (1992 to 1995), the percent of parents who were baby boomers or who had ever used marijuana did not change enough to have been a major factor in the youth increase. [Footnote #1 - Similar correlations between parental and child marijuana use, when rates of parental use vary across birth cohorts, may not be reflected in parallel variations in children's rates of use, since other factors than parental use affect the child's use. The regressions that we estimated controlled for a limited number of relevant factors and provided adjusted estimates of parental effects.

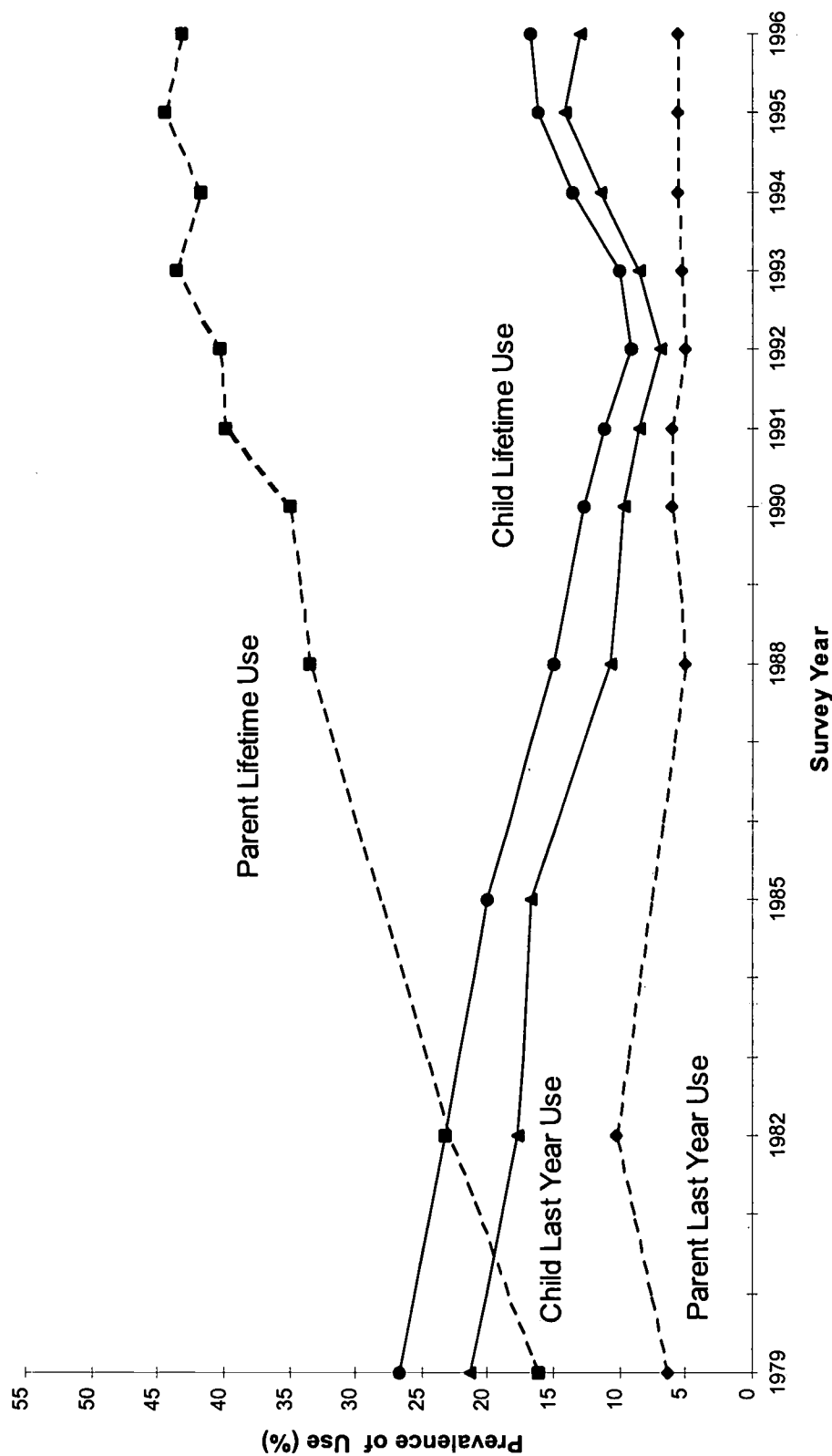
We investigated which factors in addition to parental marijuana use accounted for child marijuana use.

**Figure 6.1 Distribution of Birth Cohort of Parents of Children Aged 12-17 NHSDA 1979-1996**



Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse

**Figure 6.2 Trends in Prevalence of Lifetime and Last Year Marijuana Use Among All 12-17 Year Olds and All Parents of Youths Aged 12-17 in the National Household Survey on Drug Abuse (1979-96)<sup>1</sup>**



<sup>1</sup> Estimates for 1979 through 1993 were adjusted for changes in question format as of 1994. [Sources: SAMHSA (1991; 1998b)].



### 6.3 Predictors of Marijuana Use

Child's lifetime and last year marijuana use were regressed on selected predictors. A limited number of potential predictors were available in the NHSDA and their availability varied across surveys. Due to this variability in the availability of measures, models were estimated on three different samples of aggregated surveys to analyze the largest sample for each combination of predictors. The analyses based on the more restricted samples allowed the inclusion of several individual characteristics found in prior research to predict the use of marijuana by young people (for review, see Hawkins et al., 1992). We chose not to include an interaction term between parental cohort and marijuana use in the multiple regression models including other covariates because of the reduced sample sizes in these analyses.

(1) The 1979-1996 comprehensive aggregate sample, consisted of all the surveys and included the most restricted number of covariates. Only parent and child sociodemographic characteristics (i.e., family intactness, ethnicity, gender, education), parent lifetime, past year and extensiveness of marijuana use, use of other substances (i.e., cigarettes, alcohol, cocaine), and child drop out status were specified in the models.

(2) The 1991-1994A aggregate sample added parent and child attitudinal and personal characteristics, including parent and child delinquency, perceived risk of occasional marijuana use, and two sociodemographic characteristics, household income and population density.

(3) The 1994B-1996 aggregate sample included, in addition to the variables listed in (1) above, individual characteristics not included in (2): parent depression and anxiety, child behavioral and emotional problems, as well as two sociodemographic variables included in (2) above: household income and population density. Parent and child delinquency were not available in 1994B and 1996, and perceived risk of marijuana use was not available in 1995 and could not be included in the 1994B-1996 aggregate models.

Each model was estimated five times for each sample to assess the impact of five different measures of parental marijuana use on offspring use. The measures distinguished currency and extensiveness of use: marijuana use lifetime, last year use versus former use, frequency of lifetime use, frequency of past year use, and frequency of past month use. There were too few cases of past month use, especially frequent past month use, to provide stable estimates. These models are presented in Tables A.6.10 and A.6.11. To the extent possible, the definitions of the three other drug variables included in each model (cigarettes, alcohol, cocaine) were the same as for marijuana. However, this strategy could not be implemented with respect to frequency of lifetime and last year use for alcohol and cigarettes, either because this information had never been obtained or had been obtained only in selected years. For these two drugs, the former past year user variable was included in the lifetime frequency of marijuana use model, and the past month frequency of use variable was included in the past year frequency of marijuana model. Because the frequency of past year cocaine use was very low, the former/past year use classification was included instead in the frequency of past year marijuana model.



Since the effects of covariates other than drug use were very similar across models for child lifetime and last year use, only one set of results for these variables predicting lifetime use from lifetime parental marijuana are presented and discussed in this chapter (Table 6.5). Exceptions to the general pattern are mentioned. When patterns for lifetime and last year child marijuana use are the same, we usually refer to child marijuana use. Results for the four parental drug use variables included in each set of models are presented for child use lifetime (Table 6.6) and last year (Table 6.7) to facilitate comparison of coefficients based on different measures of drug use. The full models for each parental drug use parameterization and child lifetime and last year use are presented in Tables A.6.2-A.6.11.

One important point needs to be noted before examining the effects of specific covariates. The overall effect of parental marijuana use on the child *increased* when parent and child sociodemographic covariates and child dropout status were included in the models. The adjusted odds ratio of parental lifetime use on child lifetime use was 2.75 compared with an univariate odds ratio of 1.61 (Panel A, Table 6.6). The comparable odds ratios of parental last year use on child last year use were 2.55 and 1.71 respectively (Panel A, Table 6.7). However, compared with Panel A, the adjusted odds ratios declined somewhat when personal parent and child characteristics were controlled for, in addition to the sociodemographic variables.

*Sociodemographic characteristics.* Of the parent and child sociodemographic characteristics that were examined, many were associated, although weakly, with child lifetime (Panel A, Tables 6.5; A.6.2, A.6.4, A.6.6, A.6.8, A.6.10) and last year (Panel A, Tables A.6.3, A.6.5, A.6.7, A.6.9, A.6.11) marijuana use. Several of these relationships had been noted in the earlier discussion of descriptive data on the epidemiology of drug use in the dyads (Chapter 4). The strong univariate effect of parental birth cohort shows striking reductions with control for sociodemographic characteristics (Page 1, Tables 6.5; A.6.2-A.6.11). Adolescent males were more likely than females to use marijuana (Page 2, Tables 6.5; A.6.2-A.6.11), and whites were more likely than African-Americans to use marijuana only in their lifetime (Page 1, Tables 6.5; A.6.2, A.6.4, A.6.6, A.6.8, A.6.10). Marijuana use increased gradually with age, peaked between ages 19–21, and declined thereafter. Children from more recent birth cohorts, those born between 1970 and 1984, were less likely to use marijuana than those born between 1962–1964 (Page 2, Tables 6.5; A.6.2-A.6.11). Sociodemographic and structural characteristics of the family affected child marijuana use. Compared with children in intact families, children in widowed families were more likely to use marijuana lifetime and last year; while those in divorced families were more likely to use in the last year only (Page 1, Tables 6.5; A.6.2-A.6.11). Children in mother-child dyads were more likely to use marijuana than those in father-child dyads. Higher levels of parental education were associated with higher rates of child last year and to a lesser extent lifetime marijuana use. Living in the Western region of the United States was associated with the highest rates of adolescent marijuana use, living in the Southern region with the lowest. Household income had no impact on child marijuana use (Page 1, Tables 6.5; A.6.2-A.6.11).

*Child personal characteristics.* Child personal characteristics, including behavioral and emotional problems, delinquency and attitudes toward marijuana use predicted child marijuana use (Panels B and C, Table 6.5; Tables A.6.2-A.6.9). The coefficients were generally higher for child last year than lifetime use, probably because these predictors were measured within the last year. The most significant predictor was attitude regarding the risks involved in using marijuana. Children who perceived little or no physical risk associated with occasional marijuana use were nine times as likely to use marijuana in their lifetime and 12 times as likely to use in the last year compared with children who perceived that occasional marijuana use posed great risk (Panel B, Tables 6.5; A.6.3). Because of the cross-sectional nature of the data, the causal relationship between use and attitudes cannot be specified. Whether attitudes precede use, or whether behavior leads to more favorable drug-related attitudes remains to be determined.

Child delinquency (Panel B, Tables 6.5; A.6.2-A.6.11) and behavioral problems (Panel C, Tables 6.5; A.6.2-A.6.11) were significantly associated with marijuana use. For the continuous delinquency variable the AOR for last year use was 1.6, and for the dichotomous behavior problems the AOR was 4.1. Child emotional problems (i.e., withdrawal, anxiety and somatic complaints) were associated with lifetime marijuana use but not for last year use (Panel C, Tables 6.5; A.6.2, A.6.4, A.6.8, A.6.10).

Although very few adolescents in the sample had dropped out of high school (5.3%), those who did were almost three times as likely to use marijuana as non drop-outs (adjusted AORs=2.2-3.3) (Tables 6.5; A.6.2-A.6.11).

*Parent Characteristics.* In contrast to the predictive strength of child personality characteristics, parent personality characteristics, including major depression, anxiety problems and delinquency in the past year, did not predict child marijuana use. Parental marijuana attitudes predicted only child lifetime marijuana use in the univariate models. Without control for other factors, children's lifetime marijuana use was slightly higher (UOR= 1.5,  $p<.05$ ) when parents perceived that occasional marijuana use posed little or no physical risk than when parents perceived great risk (Panel B, Tables 6.5; A.6.2, A.6.4, A.6.6, A.6.8).

*Parental use of marijuana and other drugs.* Unique effects of parental use of marijuana and use of other drugs on child lifetime and last year marijuana use were present (Tables 6.6, 6.7; A.6.2-A.6.11). Parental marijuana use, irrespective of the time frame of the measure, was significantly and uniquely associated with child marijuana use, controlling for other covariates, including parental use of other drugs. Parents who had used marijuana in their lifetime but were not current (last year) users and those who reported using marijuana within the last year had children who used marijuana at similar rates. Although the odds of child lifetime marijuana use were slightly higher (AOR=3.7) when parents had used marijuana more than 200 days in the past year compared with parents who had used 200 or fewer days (AOR=2.7) (Panel A, Table 6.6; A.6.8), the difference was not statistically significant (See Table 6.7 for child last year use.)

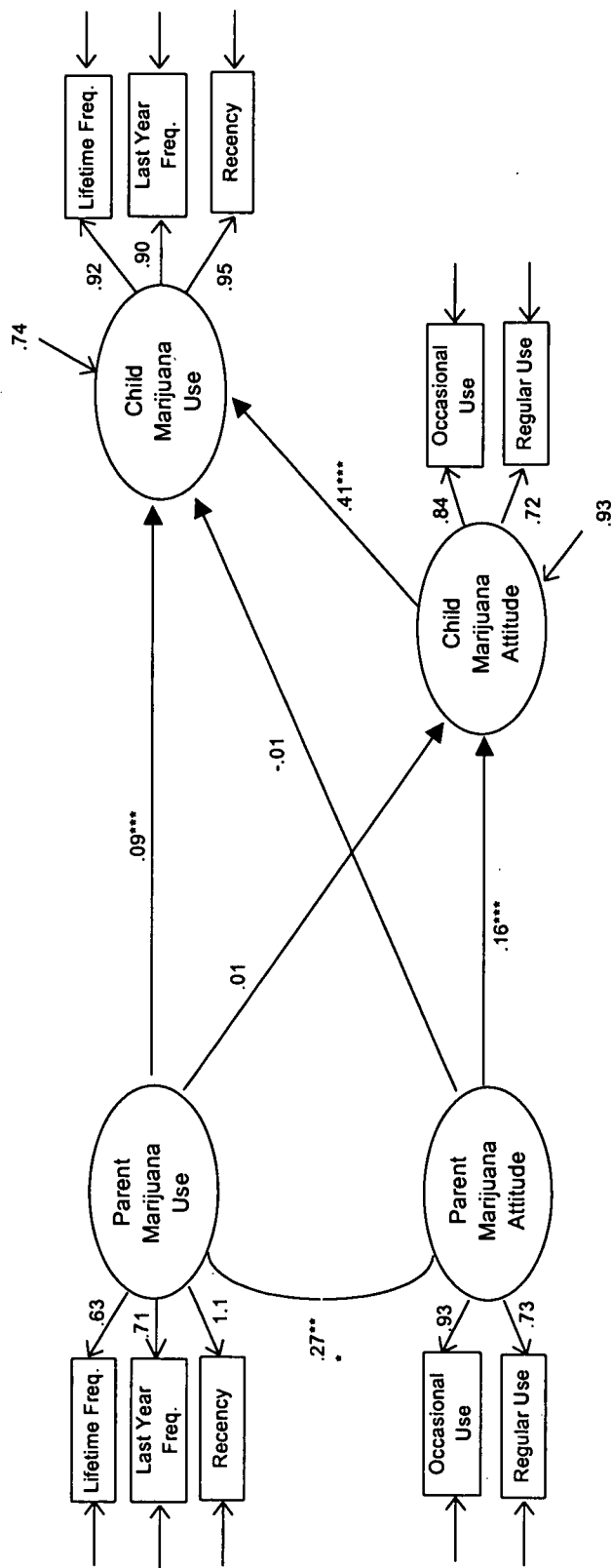
Parental use of other drugs significantly predicted child marijuana use. Parental use of cigarettes, alcohol, and cocaine, as well marijuana, each uniquely predicted child lifetime and last year marijuana use (Tables 6.6, 6.7; A.6.2-A.6.11). As we had observed for parental marijuana use, with rare exceptions, former and past year use of these three other drugs had similar associations with child marijuana use. Without control for personal characteristics, current parental drinkers had a stronger effect on the child marijuana use than former drinkers. Former and past use of cigarettes and cocaine were equally associated with child marijuana use. Extensiveness of drug consumption in the last year was not associated with increased rates of child marijuana use. A puzzling association was observed between frequency of parental smoking and child smoking (Panel C, Tables 6.6, 6.7; A.6.8-A.6.11): the *lowest* odds were observed among the *heaviest* smokers, who smoked more than 35 cigarettes a day. The low prevalence of parent last year cocaine use prevented the estimation of the effect of last year frequency of cocaine use. Percentages of children using marijuana as a function of parental use of cigarettes, alcohol and cocaine are presented in Table A.6.1.

#### **6.4 The Role of Attitudes Toward Marijuana**

Given the importance of adolescent marijuana attitudes as a correlate of marijuana use, analyses were undertaken to explore the effects and determinants of these attitudes, especially in relationship to parental marijuana use and attitudes. These analyses were restricted to the 1991-1994A aggregated surveys, where data about child attitudes as well as delinquency were available.

Structural equation models were estimated to specify the direct and indirect paths of influence of selected parental and child variables on child marijuana use. Two structural models were estimated. The first model examined the direct impact of parental marijuana use, parental marijuana attitude and child marijuana attitude on child marijuana use as well as the impact of parental attitude on child attitude. Child attitude and use were endogenous variables (Figure 6.3). The second model added exogenous variables for parental use (cigarette, alcohol, cocaine), two indicators of child deviance (delinquency and being a school drop out), and age (Figure 6.4). With the exception of age, school drop out and child delinquency, which were represented by manifest indicators, the remaining constructs were represented by latent variables. The paths for child age are not shown. (The correlation matrix is presented in Table A.6.12)

Figure 6.3. Effects of Parent Marijuana Use and Attitude on Child Marijuana Use<sup>1</sup> (Standardized Coefficients, NHSDA 1991-1994a, N=4,957)



Chi-square (35)=1070.10 (p=0.0)  
GFI = .96  
AGFI = .93

<sup>1</sup> Child age is included in the model; paths are not shown.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

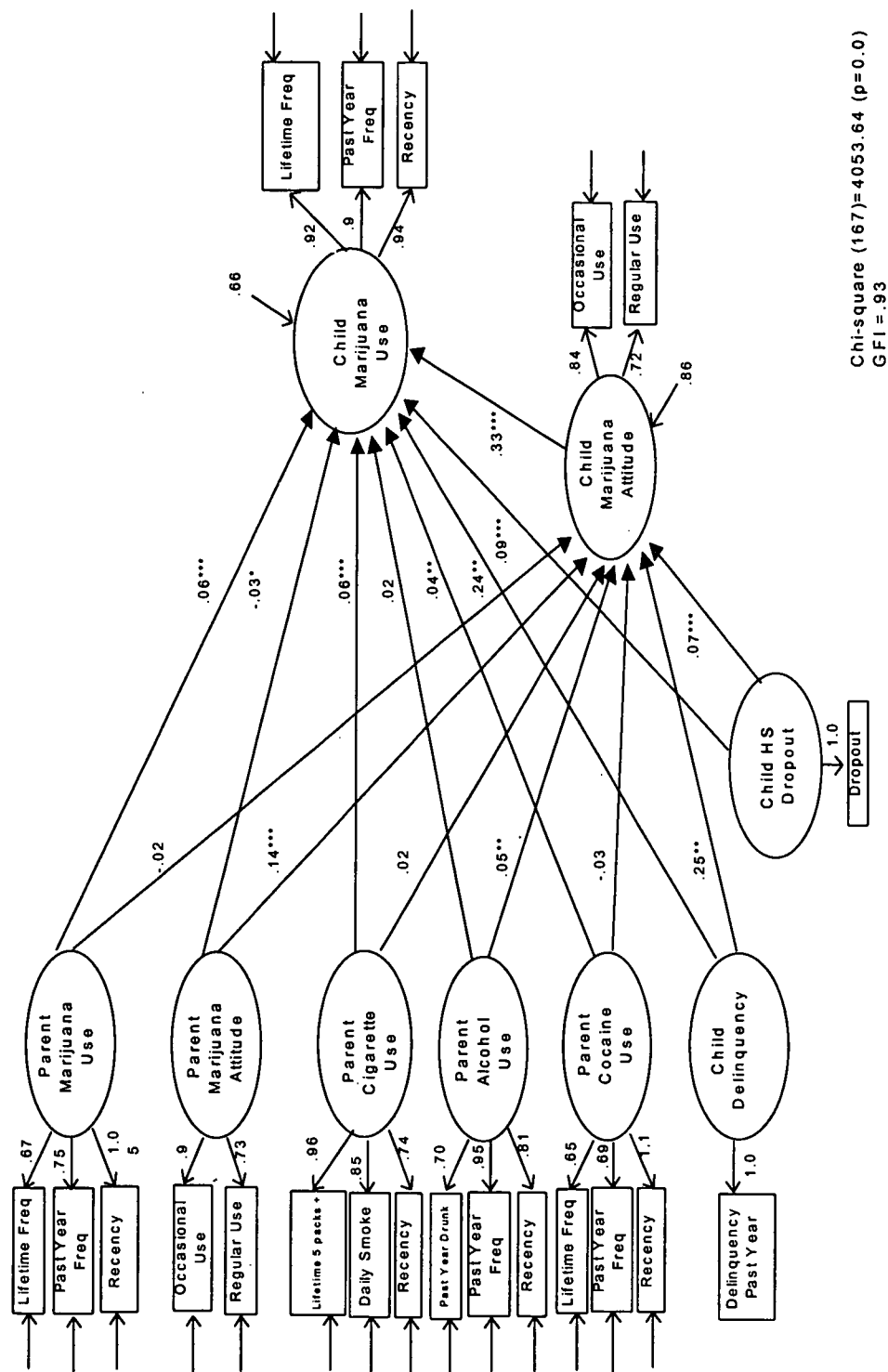
The simpler structural model (Figure 6.3) elucidates the direct and indirect effects of parental marijuana use and attitudes on child marijuana use and attitudes. Parental effects on the child are present across the same domain, from parental behavior to child behavior, or from parental attitude to child attitude. There are significant direct effects of parental marijuana use on child marijuana use, and of parental marijuana attitudes on child marijuana attitudes, but no direct cross-over effects of parental marijuana behavior on child marijuana attitudes and of parent marijuana attitudes on child marijuana behavior. As was noted in the logistic regression models, there is a very strong and significant direct path from child marijuana attitudes to child marijuana use. This effect is by far the strongest path in the model. There is a significant indirect effect (.05,  $p < .001$ ) of parent marijuana attitude on child marijuana use mediated through child marijuana attitude, but no direct effect. As a further exploration of the consequences of membership in the baby boom generation, we examined parental marijuana attitudes in each of the eight types of birth cohorts. We expected parents in the baby boom generation to have more favorable attitudes toward marijuana than other cohorts. Perceived risks associated with occasional and regular use were examined (Table 6.8). There was a decline in perceived risk from the oldest to the youngest cohorts, with similar rates for five of the intermediate cohorts. This downward trend may be related to the decreasing age of cohort members rather than to type of exposure to the marijuana epidemic.

The preeminence of child marijuana attitude was retained in the more comprehensive model (Figure 6.4). Attitude was the strongest predictor in the model and was five times as strong as parental use. The next most important predictor was child delinquency. Its association with marijuana use was four times as strong as the association between adolescent and parental use. In addition to its direct effect on use, delinquency also had an indirect effect through the child attitude (.08,  $p < .001$ ), for a total effect of (.33,  $p < .001$ ). The same pattern was observed with respect to being a school drop out, although the size of the path was smaller. Of the four parental drug use factors, marijuana and cigarette use had the same effect. The effect of cocaine was slightly lower. There was no direct effect of alcohol use on the child marijuana use, but an indirect effect through its impact on the child marijuana related attitude. Surprisingly, this was the only one of the four substances to impact on the child attitude, after controlling for the use of other drugs.

The most striking results presented in this chapter pertain to the importance of children's marijuana related attitudes on their marijuana use and the importance of parental use of drugs other than marijuana in addition to parental marijuana use.

To assess the substantive implications of the results, predicted changes in rates of adolescent marijuana use were estimated from assumed changes in parental behaviors and attitudes and youth attitudes. Coefficients obtained in Figure 6.4 were used to calculate these estimates.

Figure 6.4. Predictors of Child Marijuana Use<sup>1</sup> (Standardized Coefficients, NHSDA 1991-1994a, N=4,957)



<sup>1</sup> Child age is included in the model; paths are not shown. Correlations among exogenous variables not shown.  
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

### *Effect of parental marijuana use on child marijuana use*

For a one-unit decrease in parental last year marijuana use, e.g., from 1-2 days a year to not using at all, 7 out of 100 youths would reduce their marijuana use by one level, e.g., from using marijuana 6 times a month to using marijuana 3 times a month.

### *Effect of parental marijuana attitude on child marijuana use*

For a one-unit decrease in favorableness of parental attitudes toward marijuana use, e.g., from moderate to great perceived risk of occasional use, 4 out of 100 youths would reduce their marijuana use by one level, e.g., from using marijuana 6 times a month to using marijuana 3 times a month.

### *Effect of parental marijuana attitude on child marijuana attitude*

For a one-unit decrease in favorableness of parental attitudes toward marijuana use, e.g., from moderate to great perceived risk of occasional use, 13 out of 100 youths would increase their perceived harmfulness of marijuana use by one unit, e.g., an increase from moderate to great perceived risk of occasional use.

### *Effect of child marijuana attitude on child marijuana use*

For a one-unit decrease in favorableness of youth attitudes toward marijuana use, e.g., from moderate to great perceived risk of occasional use, 36 out of 100 youths would reduce their marijuana use by one level, e.g., from using marijuana 6 times a month to using marijuana 3 times a month.

As we noted earlier, in the absence of longitudinal data, the causal relationship between young people's marijuana attitudes and use cannot be determined. However, at any point in time, the association of use with attitude is the strongest of any other factor that was examined.



Table 6.1. Parent Age, Child Age, Parent and Child Lifetime and Last Year Marijuana Use by Parental Exposure to the Marijuana Epidemic<sup>1</sup> (NHSDA 1979-1996)

	N	Parent Age (years)	Child Age (years)	Parent Lifetime Marijuana Use %	Parent Last Year Marijuana Use %	Child Lifetime Marijuana Use %	Child Last Year Marijuana Use %
<b>Total N</b>	9,463	41.5	15.1	32.8	5.3	18.0	13.2
<b>Parental Birth Cohort</b>							
1. Pre-epidemic (before 1946)	2,119	47.3	15.8	14.1	3.0	26.0	18.8
2. Pre-epidemic/low incidence (1946-1948)	1,066	43.3	15.4	34.6	4.7	19.0	13.3
3. Low incidence (1949-1953)	1,951	40.8	15.2	38.4	5.3	16.3	12.0
4. Low incidence/high incidence (1954-1956)	1,235	37.6	14.5	44.9	6.3	9.3	6.9
5. High incidence (1957-1959)	1,379	34.9	14.2	48.9	8.2	12.6	9.7
6. High incidence/high prevalence (1960-1962)	1,165	32.5	13.6	52.8	10.4	8.8	7.7
7. High prevalence (1963-1964)	366	30.9	13.5	47.8	9.4	7.9	5.0
8. Post epidemic (after 1964)	182	28.5	12.8	44.9	10.0	7.5	6.5

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

Note: Birth cohort groupings reflect parental exposure to the marijuana epidemic at ages 15-18.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table 6.2. Association in Marijuana Use Between Parents and Children Aged 12-25<sup>1</sup>, by Parental Birth Cohorts and Exposure to the Marijuana Epidemic, Unadjusted and Adjusted<sup>2</sup> Odds Ratios<sup>3</sup> (NHSDA 1979-1996)

	N	Parent Marijuana Use					
		Lifetime			Last Year		
		Child Lifetime		Child Last Year	Child Lifetime		Child Last Year
		OR	AOR	OR	AOR	OR	AOR
<b>Total</b>	9,463	1.6 ***	2.2 ***	1.7 ***	2.2 ***	1.7 ***	2.5 ***
<b>Parental Birth Cohorts: Single Groups</b>							
1. Pre epidemic (before 1946)	2,119	2.4 ***	2.8 ***ab	2.3 ***	2.4 ***	2.5 **	2.6 ***a
2. Pre epidemic/low incidence (1946-1948)	1,066	2.0 **	2.9 ***ab	2.6 ***	3.1 ***	1.7	1.6
3. Low incidence (1949-1953)	1,951	2.8 ***	3.5 ***ab	2.9 ***	3.4 ***	2.4 *	3.7 ***ac
4. Low incidence/high incidence (1954-1956)	1,235	4.1 ***	5.1 ***a	3.3 ***	3.7 ***	3.4 *	6.2 ***ac
5. High incidence (1957-1959)	1,379	2.0 **	2.2 ***b	2.3 **	2.4 **	1.8	1.5
6. High incidence/high prevalence (1960-1962)	1,165	2.1 **	2.1 ***b	1.9 *	1.9 *	1.2	1.3
7. High prevalence (1963-1964)	366	2.4	2.2 ab	1.2	1.1	.4	.5
8. Post epidemic (after 1964)	182	1.5	2.0	2.2	3.0 *	6.9 *	17.5 ***c
<b>Parental Birth Cohorts: Dichotomy</b>							
1. Cohorts 1-4 (before 1957)	6,371	1.8 ***	2.3 ***	1.9 ***	2.2 ***	2.1 ***	2.9 ***
2. Cohorts 5-8 (after 1956)	3,092	2.0 ***	2.2 ***	2.1 ***	2.1 ***	1.5	1.5
<b>Parental Birth Cohorts: Trichotomy</b>							
1. Pre Baby Boomer (before 1946)	2,119	2.4 ***	2.8 ***	2.3 ***	2.4 ***	2.5 **	2.6 ***a
2. Baby Boomer (1946-1964)	7,162	2.3 ***	3.1 ***	2.4 ***	3.0 ***	1.9 ***	2.5 ***a
3. Post Baby Boomer (after 1964)	182	1.5	2.0	2.2	3.0 *	6.9 *	17.5 ***b

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Adjusted for parent and child age.

<sup>3</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

a-c Odds ratios with different superscripts are significantly different from each other, Wald test ( $p < .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Note: Birth cohort groupings reflect parental exposure to the marijuana epidemic at ages 15-18.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.3. Logistic Regressions of Child Lifetime and Last Year Marijuana Use by Parent Lifetime Marijuana Use, Parent and Child Age at Survey, and Parental Exposure to the Marijuana Epidemic<sup>1,2</sup> (NHSDA 1979-1996)

Predictors	Child Lifetime Marijuana Use			Child Last Year Marijuana Use		
	Model 1 (Unadjusted)		Model 2 (Adjusted)	Model 1 (Unadjusted)		Model 2 (Adjusted)
	OR	(95% CI)	AOR <sup>3</sup>	OR	(95% CI)	AOR <sup>3</sup>
Parent lifetime marijuana use	1.62 ***	(1.36-1.92)	2.98 ***	1.71 ***	(1.42-2.06)	2.51 ***
Parent age at survey (in years)	1.05 ***	(1.04-1.06)	.95 ***	1.04 ***	(1.03-1.05)	.96 ***
Child age at survey (in years)	1.36 ***	(1.31-1.41)	1.41 ***	1.24 ***	(1.20-1.27)	1.26 ***
Cohort 2 (1946-1948) (versus Cohort 1)	.67 ***	(.51-.87)	.48 ***	.66 *	(.48-.92)	.45 ***
Cohort 3 (1949-1953)	.55 ***	(.43-.71)	.30 ***	.59 ***	(.44-.78)	.34 ***
Cohort 4 (1954-1956)	.29 ***	(.22-.39)	.13 ***	.32 ***	(.23-.45)	.17 ***
Cohort 5 (1957-1959)	.41 ***	(.31-.54)	.30 ***	.46 ***	(.34-.63)	.31 ***
Cohort 6 (1960-1962)	.27 ***	(.20-.37)	.21 ***	.36 ***	(.26-.49)	.27 ***
Cohort 7 (1963-1964)	.25 ***	(.14-.42)	.17 ***	.23 ***	(.13-.41)	.22 **
Cohort 8 (after 1964)	.23 ***	(.12-.46)	.24 ***	.30 **	(.14-.64)	.22 ***
Parent lifetime marijuana use X Cohort 2			2.61		(1.39-4.85)	3.00
Parent lifetime marijuana use X Cohort 3			3.39		(1.95-5.81)	3.10
Parent lifetime marijuana use X Cohort 4			4.53		(2.23-9.21)	3.39
Parent lifetime marijuana use X Cohort 5			2.03		(1.11-3.78)	2.23
Parent lifetime marijuana use X Cohort 6			1.99		(1.07-3.78)	1.86
Parent lifetime marijuana use X Cohort 7			2.36		(.77-7.17)	1.19
Parent lifetime marijuana use X Cohort 8			1.75		(.41-7.10)	2.44

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>3</sup> The OR coefficients listed for the interactions are the total effects for each birth cohort, including the main effects. The ORs are calculated as the exponentiated sum of the main effect of parental lifetime marijuana use and the interaction effect with each parental birth cohort. The interaction terms are not significant. \*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.4. Logistic Regressions of Child Lifetime and Last Year Marijuana Use by Parent Last Year Marijuana Use, Parent and Child Age at Survey, and Parental Exposure to the Marijuana Epidemic<sup>1,2</sup> (NHSDA 1979-1996)

Predictors	Child Lifetime Marijuana Use				Child Last Year Marijuana Use			
	Model 1 (Unadjusted)		Model 2 (Adjusted)		Model 1 (Unadjusted)		Model 2 (Adjusted)	
	OR	(95% CI)	AOR <sup>3</sup>	(95% CI)	OR	(95% CI)	AOR <sup>3</sup>	(95% CI)
Parent last year marijuana use	1.74 ***	(1.27-2.38)	3.42 ***	(1.68-6.93)	1.93 ***	(1.38-2.71)	3.04 ***	(1.50-6.18)
Parent age at survey (in years)	1.05 ***	(1.04-1.06)	.95 ***	(.93-.97)	1.04 ***	(1.03-1.05)	.96 **	(.94-.99)
Child age at survey (in years)	1.36 ***	(1.31-1.41)	1.39 ***	(1.33-1.45)	1.24 ***	(1.20-1.27)	1.25 ***	(1.21-1.30)
Cohort 2 (1946-1948) (versus Cohort 1)	.67 ***	(.51-.87)	.60 ***	(.44-.82)	.66 *	(.48-.92)	.62 *	(.43-.90)
Cohort 3 (1949-1953)	.55 ***	(.43-.71)	.45 ***	(.33-.61)	.59 ***	(.44-.78)	.49 ***	(.34-.71)
Cohort 4 (1954-1956)	.29 ***	(.22-.39)	.24 ***	(.17-.35)	.32 ***	(.23-.45)	.26 ***	(.17-.41)
Cohort 5 (1957-1959)	.41 ***	(.31-.54)	.38 ***	(.26-.56)	.46 ***	(.34-.63)	.43 ***	(.28-.68)
Cohort 6 (1960-1962)	.27 ***	(.20-.37)	.29 ***	(.18-.44)	.36 ***	(.26-.49)	.35 ***	(.21-.59)
Cohort 7 (1963-1964)	.25 ***	(.14-.42)	.27 ***	(.15-.50)	.23 ***	(.13-.41)	.23 ***	(.11-.49)
Cohort 8 (after 1964)	.23 ***	(.12-.46)	.19 ***	(.08-.45)	.30 **	(.14-.64)	.20 **	(.07-.55)
Parent last year marijuana use X Cohort 2			1.97	(.65-6.06)			1.49	(.36-5.86)
Parent last year marijuana use X Cohort 3			2.59	(.99-6.64)			2.97	(1.12-7.98)
Parent last year marijuana use X Cohort 4			4.10	(1.30-12.86)			4.71	(1.43-15.54)
Parent last year marijuana use X Cohort 5			1.65	(.65-4.24)			1.52	(.58-4.04)
Parent last year marijuana use X Cohort 6			1.17 *	(.44-3.22)			1.21	(.46-3.28)
Parent last year marijuana use X Cohort 7			.33 **	(.07-1.78)			.56	(.09-3.10)
Parent last year marijuana use X Cohort 8			8.41	(1.40-52.69)			10.28	(1.61-65.39)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>3</sup> The OR coefficients listed for the interactions are the total effects for each birth cohort, including the main effects. The ORs are calculated as the exponentiated sum of the main effect of parental last year marijuana use and the interaction effect with each parental birth cohort.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.5. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
Parent Sociodemographics												
Parent sex (vs. female)	2,922	.97	.75 *	(.60-.94)	1,544	.94	.77	(.51-1.16)	645	.73	.57 *	(.36-.89)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.84	.68 **	(.52-.91)	1,515	.98	.74	(.48-1.13)	1,013	.89	.58 *	(.34-.99)
Hispanic	2,996	.88	.97	(.73-1.27)	1,574	1.16	1.16	(.71-1.88)	1,065	.98	.81	(.47-1.38)
Other	144	.68	.96	(.50-1.83)	101	.59	.74	(.31-1.75)	20	.30 *	1.06	(.41-2.77)
Parent birth cohorts (vs. before 1946)	2,119				983				222			
Cohort 2 (1946-1948)	1,066	.67 **	.98	(.72-1.33)	579	.94	1.10	(.65-1.86)	283	.81	.98	(.54-1.80)
Cohort 3 (1949-1953)	1,951	.55 ***	.94	(.68-1.30)	1,097	.71	.97	(.60-1.58)	613	.81	1.10	(.58-2.10)
Cohort 4 (1954-1956)	1,235	.29 ***	.63 *	(.43-.92)	723	.29 ***	.49 *	(.26-.92)	401	.53 *	.93	(.48-1.80)
Cohort 5 (1957-1959)	1,379	.41 ***	1.09	(.72-1.63)	924	.53 **	.87	(.66-2.82)	399	.54 *	.88	(.41-1.89)
Cohort 6 (1960-1962)	1,165	.27 ***	.95	(.60-1.51)	528	.30 ***	.82	(.32-2.09)	825	.39 ***	1.07	(.51-2.25)
Cohort 7 (1963-1964)	366	.25 ***	1.09	(.58-2.03)	87	.03 ***	.10 *	(.01-.68)	279	.39 **	1.59	(.65-3.89)
Cohort 8 (after 1964)	182	.23 ***	2.89 *	(1.19-7.00)	36	.05 **	.25	(.04-1.53)	146	.34 **	3.60 **	(1.50-9.61)
Parent education (vs. < high school)	3,128				1,587				999			
High school graduate	3,283	1.21	1.32 *	(1.03-1.70)	1,707	1.06	1.03	(.64-1.65)	1,031	1.19	1.34	(.89-2.02)
Some college	1,793	1.16	1.34	(.99-1.82)	935	1.05	1.07	(.64-1.77)	582	1.03	1.08	(.63-1.84)
College graduate	1,258	1.01	1.21	(.86-1.71)	728	.85	1.09	(.58-2.07)	356	.92	1.13	(.60-2.13)
Parent marital status (vs. married)	6,600				3,444				1,987			
Widowed	313	2.82 ***	2.20 ***	(1.43-3.39)	129	1.51	.74	(.31-1.75)	78	2.65 *	2.01	(.79-5.15)
Divorced/separated	1,759	1.35 **	1.20	(.92-1.56)	968	1.57 **	.91	(.55-1.50)	598	1.45 *	1.31	(.82-2.11)
Never married	791	.86	1.01	(.67-1.54)	416	.79	.95	(.49-1.86)	305	.93	1.23	(.65-2.30)
Region of country (vs. West)	2,115				1,199				613			
South	3,945	.63 ***	.58 ***	(.43-.78)	2,009	.69	.65	(.33-1.25)	1,375	.64 *	.62	(.37-1.02)
North Central	1,834	.77	.73	(.53-1.01)	918	.74	.80	(.29-1.27)	558	.82	.66	(.39-1.12)
Northeast	1,569	.95	.78	(.58-1.06)	831	.89	.81	(.42-1.57)	422	.93	.60 *	(.37-.97)
Household income (vs. <\$8,999)					657				364			
\$9,000-19,999					1,157	1.06	1.00	(.57-1.77)	751	1.20	1.19	(.60-2.36)
\$20,000-39,999					1,579	1.48	1.32	(.77-2.28)	947	1.06	.90	(.43-1.88)
\$40,000-74,999					1,206	1.28	.85	(.46-1.58)	698	1.54	1.31	(.59-2.91)
\$75,000+					358	1.64	.91	(.41-2.06)	208	1.22	1.23	(.52-2.89)
Population density (vs. MSA with 1 million+)					586				1,276			
MSA with <1 million					831	.87	.73	(.48-1.13)	977	.97	1.03	(.73-1.46)
Not in MSA					3,540	.84	.99	(.58-1.71)	715	.81	.86	(.57-1.30)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.5 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (vs. great risk)												
Moderate risk					2,405	1.01	1.04	(.70-1.54)				
Slight/no risk					1,327		1.14	(.71-1.83)				
Missing <sup>4</sup>					1,160	1.48 *	.13	(.01-2.72)				
Delinquency in past year					99	1.13	.93 *	(.63-1.37)				
Major depressive episode in past year (vs. not)									2,695	1.32	.93	(.52-1.65)
Major depressive episode									273			
General anxiety disorder in past year (vs. not)									2,888	1.91	1.25	(.56-2.76)
General anxiety disorder									80			
<b>Child Sociodemographics</b>												
Child sex (vs. female)	4,807	1.21 *	1.27 *	(1.03-1.57)	2,512	1.40 *	.93	(.62-1.37)	1,498	1.11	1.63 ***	(1.26-2.12)
Child age at survey (vs. age 15)												
12	1,262				642				377			
13	1,703	0.05 ***	.04 ***	(.02-.09)	891	.08 ***	.08 ***	(.02-.28)	511	.07 ***	.05 ***	(.02-.12)
14	1,621	0.22 ***	.20 ***	(.12-.32)	872	.21 ***	.20 ***	(.07-.57)	489	.12 ***	.10 ***	(.04-.24)
15	1,470	0.44 ***	.40 ***	(.28-.59)	742	.35 ***	.39 **	(.20-.76)	451	.38 **	.30 **	(.14-.64)
16	1,273	1.55 **	1.65 **	(1.21-2.24)	646	1.56	1.22	(.67-2.21)	376	1.41	1.25	(.72-2.18)
17	1,063	1.96 ***	2.23 ***	(1.59-3.13)	538	2.18 **	2.14 *	(1.02-4.48)	320	1.89 *	1.49	(.72-3.06)
18	248	1.18	1.41	(.82-2.42)	138	1.73	.90	(.35-2.35)	109	1.75	2.62 *	(1.19-5.79)
19	189	3.48 ***	5.16 ***	(2.86-9.29)	102	6.89 ***	5.82 **	(1.86-18.20)	87	3.43 ***	4.60 ***	(2.08-10.16)
20	155	3.47 ***	6.32 ***	(3.38-11.81)	92	6.50 ***	6.87 **	(2.18-21.66)	63	3.42 **	5.06 **	(1.66-15.43)
21	120	4.12 ***	7.87 ***	(3.91-15.84)	71	6.45 ***	6.52 ***	(2.22-19.16)	49	5.68 ***	5.81 **	(1.87-18.05)
22	113	1.76	1.55	(.60-3.99)	71	2.37	1.16	(.30-4.39)	42	3.79 **	3.45	(.91-13.03)
23	99	4.55 ***	3.01 **	(1.33-6.80)	63	9.34 ***	5.81 *	(1.34-23.51)	36	3.43 *	3.03	(.66-13.85)
24	73	5.72 ***	4.22 ***	(1.97-9.00)	43	9.42 ***	8.64 **	(2.02-36.94)	30	6.99 ***	7.82 **	(2.01-30.41)
25	74	4.94 ***	3.72 ***	(1.77-7.85)	46	8.81 ***	14.05 **	(2.34-84.26)	28	5.27 **	5.80 *	(1.43-23.46)
Child birth cohort (vs. 1962-1964)												
Cohort 2 (1965-1969)	340											
Cohort 3 (1970-1974)	833	.38 ***	.81	(.54-1.23)	189				15			
Cohort 4 (1975-1979)	1,452	.51 ***	.26 ***	(.17-.39)	895	.46 *	.68	(.27-1.71)	206	1.14	1.36	(.39-4.72)
Cohort 5 (1980-1984)	4,518	.18 ***	.19 ***	(.13-.27)	3,228	.11 ***	.42	(.13-1.42)	1,072	.36	.71	(.17-2.91)
High school dropout (vs. non-dropout)	2,320	.06 ***	.20 ***	(.12-.33)	645	.02 ***	.72	(.14-3.65)	1,675	.07 ***	.50	(.11-2.26)
Dropout	8,909				4,685				2,741			
	554	3.20 ***	2.21 ***	(1.48-3.30)	292	5.07 ***	2.64 **	(1.41-4.93)	227	2.24 ***	1.50	(.78-2.89)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.5 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Child Personal Characteristics</b>												
Risk of occasional marijuana use (great risk)												
Moderate risk	2,568				3.31 ***		2.91 ***	(1.93-4.40)				
Slight/no risk	1,428				13.44 ***		8.77 ***	(6.05-12.72)				
Missing <sup>4</sup>	905				4.46 *		11.61 **	(1.86-72.48)				
Child delinquency in past year	56											
Behavioral problem in past six months (vs. no problem)					1.55 ***		1.53 ***	(1.38-1.70)	1,975			
Problem									476	4.7 ***	3.9 ***	(2.64-5.72)
Missing <sup>4</sup>									73	1.54	2.65	(.84-8.36)
Missing <sup>5,6</sup>									444	7.58 ***	1.00	(1.00-1.00)
Emotional problem in past six months (vs. no problem)									2,098			
Problem									353	2.8 ***	1.7 *	(1.00-2.73)
Missing <sup>4,6</sup>									73	1.18	1.00	(1.00-1.00)
Missing <sup>5,6</sup>									444	5.83 ***	1.00	(1.00-1.00)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table 6.6. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Use of Four Substances<sup>1,2</sup>  
(NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Lifetime Substance Use</b>												
Marijuana lifetime use (vs. never)	6,379	1.61 ***	2.77 ***	(2.13-3.61)	3,210	1.95 ***	2.28 ***	(1.43-3.64)	1,952	1.61 **	1.72 **	(1.15-2.56)
Lifetime use	3,084				1,747				1,016			
Cigarette smoking lifetime (vs. never)	2,517	2.01 ***	1.47 **	(1.12-1.94)	1,435	1.98 ***	1.30	(.83-2.05)	804	1.96 ***	2.01 **	(1.28-3.17)
Lifetime use	6,946				3,522				2,164			
Alcohol lifetime use (vs. never)	1,364	2.91 ***	2.16 ***	(1.45-3.23)	694	2.72 ***	1.89 *	(1.06-3.36)	520	2.40 ***	1.74	(.93-3.26)
Lifetime use	8,099				4,263				2,448			
Cocaine lifetime use (vs. never)	8,535	1.53 ***	1.71 **	(1.21-2.42)	4,412	1.96 ***	2.27 *	(1.16-4.47)	2,658	1.65 *	2.07 **	(1.26-3.42)
Lifetime use	928				545				310			
<b>Parent Former/Current Substance Use</b>												
Marijuana (vs. never)	6,379	1.55 ***	2.58 ***	(1.96-3.39)	3,210	1.93 ***	2.26 ***	(1.40-3.66)	1,952	1.57 **	1.70 **	(1.14-2.53)
Former	2,512	2.00 ***	3.09 ***	(1.93-4.93)	1,449	2.09 **	1.77	(.84-3.75)	851	1.86 *	1.89	(.82-4.33)
Last year	572				298				165			
Cigarette (vs. never)	2,517	1.74 ***	1.34	(.99-1.80)	1,435	1.71 **	1.18	(.73-1.89)	804	1.96 **	2.00 **	(1.20-3.35)
Former	3,284	2.33 ***	1.60 **	(1.20-2.14)	1,723	2.34 ***	1.57	(.94-2.64)	987	1.96 ***	2.01 **	(1.27-3.18)
Last year	3,662				1,799				1,177			
Alcohol (vs. never)	1,364	2.24 ***	1.77 *	(1.12-2.80) <sup>a</sup>	694	2.64 **	2.16 *	(1.16-4.01)	520	2.07 *	1.70	(.83-3.50)
Former	1,754	3.13 ***	2.40 ***	(1.61-3.58) <sup>b</sup>	901	2.74 ***	1.73	(.94-2.64)	535	2.51 ***	1.77	(.95-3.31)
Last year	6,345				3,362				1,913			
Cocaine (vs. never)	8,535	1.45 ***	1.64 *	(1.12-2.40)	4,412	1.81 **	2.10	(.98-4.48)	2,658	1.58 *	1.84 *	(1.11-3.03)
Former	722	1.97 ***	1.80	(.80-4.04)	427	2.73 *	3.86	(.98-15.20)	254	2.19	4.61 **	(1.47-14.41)
Last year	206				118				56			
<b>Parent Lifetime Frequency<sup>4</sup></b>												
Marijuana use in lifetime (vs. never)	6,379	1.58 ***	2.54 ***	(1.88-3.43)	3,210	1.74 **	2.12 **	(1.23-3.64)	1,952	1.79 **	1.89 **	(1.24-2.88)
1-10 times	1,718	1.73 **	3.10 ***	(2.04-4.71)	1,010	2.31 **	2.94 ***	(1.58-5.45)	505	2.24	1.35	(.72-2.52)
11-99 times	634	1.61 **	2.60 ***	(1.68-4.02)	350	2.25 ***	2.37 *	(1.09-5.17)	224	1.52 *	1.53	(.78-2.99)
100+ times	701				372				279			
Cigarette (vs. never)	2,517	1.74 ***	1.33	(.99-1.80)	1,435	1.71 **	1.17	(.73-1.87)	804	1.96 **	2.05 **	(1.22-3.45)
Former	3,284	2.33 ***	1.58 **	(1.18-2.12)	1,723	2.34 ***	1.57	(.93-2.64)	987	1.96 ***	1.98 **	(1.24-3.15)
Last year	3,662				1,799				1,177			
Alcohol (vs. never)	1,364	2.24 ***	1.74 *	(1.09-2.75) <sup>a</sup>	694	2.64 **	2.16 *	(1.17-3.99)	520	2.07 *	1.61	(.79-3.28)
Former	1,754	3.13 ***	2.42 ***	(1.63-3.61) <sup>b</sup>	901	2.74 ***	1.76	(.95-3.25)	535	2.51 ***	1.78	(.95-3.31)
Last year	6,345				3,362				1,913			
Cocaine use in lifetime (vs. never)	8,535	1.55 **	1.62 *	(1.05-2.51) <sup>a</sup>	4,412	1.88 **	1.67	(.77-3.65)	2,658	1.59	2.02 *	(1.08-3.88) <sup>a</sup>
1-10 times	505	1.24	1.39	(.72-2.65) <sup>b</sup>	309	2.07 *	3.22	(.90-11.47)	148	1.22	1.58	(.66-3.82) <sup>b</sup>
11-99 times	228	2.11 **	2.95 ***	(1.64-5.29) <sup>b</sup>	134	2.40 *	2.84 *	(1.04-7.81)	79	2.51 **	4.41 **	(1.80-10.82) <sup>b</sup>
100+ times	183				93				81			

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Results for missing categories are not shown but are displayed in the Appendix Tables.

<sup>a,b</sup> Comparisons across categories of use for each drug: odds ratios with different superscripts are significantly different from each other, Wald F-test (p<.05).

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.6 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Use of Four Substances<sup>1,2</sup>  
(NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
Parent Past Year Frequency												
Marijuana use in past year (vs. never)	6,379				3,210				1,952			
Former, not past year	2,512	1.55 ***	2.57 ***	(1.95-3.39)	1,449	1.93 ***	2.24 **	(1.38-3.64)	851	1.57 **	1.60 *	(1.07-2.39)
1-200 days	439	1.46 *	2.69 ***	(1.66-4.38)	267	2.01 **	1.53	(.68-3.43)	139	1.73	1.57	(.67-3.65)
200+ days	61	2.30 *	3.69 **	(1.70-8.04)	31	3.00	4.83 *	(1.32-17.66)	26	3.01 *	2.62	(.67-10.19)
Cigarette use in past month (vs. never)	2,517				1,435				804			
Former, not past month	3,599	1.75 ***	1.37 *	(1.02-1.83)	1,898	1.73 **	1.20	(.75-1.92)	1,055	1.91 **	1.98 **	(1.18-3.31) <sup>ab</sup>
<15 cigarettes/day	1,735	1.88 ***	1.40	(.99-1.98)	823	1.74 *	1.26	(.69-2.32)	653	2.08 ***	2.03 **	(1.28-3.22) <sup>ab</sup>
16-35 cigarette/day	1,274	2.75 ***	1.68 **	(1.20-2.35)	634	2.82 ***	1.71	(.96-3.05)	363	2.26 **	2.68 **	(1.40-5.15) <sup>a</sup>
>35 cigarettes/day	230	3.27 ***	1.91 *	(1.13-3.25)	98	3.32 **	1.61	(.54-4.81)	62	1.37	.90	(.29-2.83) <sup>b</sup>
Alcohol use in past month (vs. never)	1,364				694				520			
Former, not past month	3,356	2.32 ***	1.87 **	(1.23-2.84)	1,817	2.44 **	1.88 *	(1.04-3.39)	998	2.05 *	1.38	(.71-2.69)
<2 drinks/day	3,293	2.54 ***	2.16 ***	(1.41-3.32)	2,015	2.92 ***	1.98 *	(1.03-3.80)	1,096	2.56 ***	1.86	(.98-3.54)
2+drinks/day	370	3.50 ***	1.94 *	(1.02-3.69)	232	4.69 ***	2.09	(.79-5.54)	116	2.64 *	2.06	(.80-5.30)
Cocaine (vs. never)	8,535				4,412				2,658			
Former	722	1.45 ***	1.67 **	(1.15-2.43)	427	1.81 **	2.05 *	(1.00-4.21)	254	1.58 *	1.89 *	(1.14-3.12)
Last year	206	1.97 ***	1.85	(.80-4.26)	118	2.73 *	3.92	(.98-15.69)	56	2.19	4.23 *	(1.31-13.68)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Results for missing categories are not shown but are displayed in the Appendix Tables.

<sup>a-b</sup> Comparisons across categories of use for each drug: odds ratios with different superscripts are significantly different from each other, Wald F-test (p<.05)  
\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table 6.7. Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Use of Four Substances<sup>1,2</sup>  
(NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Lifetime Substance Use</b>												
Marijuana lifetime use (vs. never)	6,379	1.71 ***	2.58 ***	(1.97-3.37)	3,210	2.31 ***	2.04 **	(1.24-3.37)	1,952	1.82 ***	1.66 *	(1.10-2.51)
Cigarette smoking lifetime (vs. never)	3,084	2.517	1.435	(1.39-2.50)	1,747	3.69 ***	2.79 ***	(1.55-5.02)	1,016	2.40 ***	2.42 ***	(1.57-3.72)
Alcohol lifetime use (vs. never)	6,946	1.364	1.96 **	(1.19-3.23)	694	2.60 *	1.04	(.49-2.19)	2,164	2.72 ***	1.65	(.85-3.22)
Cocaine lifetime use (vs. never)	8,099	8.535	1.54 **	(1.02-2.12)	4,412	2.39 ***	2.46 **	(1.24-4.88)	2,448	1.53 *	1.52	(.88-2.62)
<b>Parent Former/Current Substance Use</b>												
Marijuana (vs. never)	6,379	1.61 ***	2.38 ***	(1.81-3.14)	3,210	2.24 ***	2.00 **	(1.22-3.29)	1,952	1.77 *	1.66 *	(1.09-2.53)
Former	2,512	2.26 ***	2.97 ***	(1.78-4.95)	1,449	2.75 ***	1.98	(.73-5.37)	851	2.09 ***	1.69	(.71-4.03)
Last year	572	2.517	1.77 ***	(1.29-2.42)	298	4.22 ***	2.71 **	(1.47-4.97)	165	2.48 ***	2.25 ***	(1.52-4.10)
Cigarette (vs. never)	3,284	2.93 ***	1.89 ***	(1.37-2.61)	1,435	2.83 ***	2.85 **	(1.47-5.52)	804	2.29 ***	1.58	(.76-3.27)
Former	3,662	2.12 ***	1.47	(.83-2.61)*	1,799	2.83 ***	1.09	(.50-2.37)	1,177	2.85 ***	1.70	(.87-3.34)
Last year	1,364	3.60 ***	2.25 **	(1.37-3.68)*	694	2.20 **	2.30 *	(1.05-5.05)	535	1.39	1.32	(.76-2.29)
Alcohol (vs. never)	1,754	1.39 *	1.35	(.88-2.06)	3,362	3.42 **	3.56	(.87-14.58)	2,658	2.57 *	4.01 *	(1.20-13.43)
Former	6,345	2.33 **	1.87	(.85-4.12)	4,412	1.90			254			
Cocaine (vs. never)	8,535	1.80 ***	2.28 ***	(1.70-3.08)	427	1.98 **	1.83 *	(1.06-3.16)	56	1.89 ***	1.68 *	(1.09-2.59)
Former	722	1.90 ***	3.00 ***	(1.93-4.66)	1,010	2.84 ***	2.86 **	(1.46-5.60)	505	1.63	1.39	(.70-2.76)
Last year	206	1.82 ***	2.78 ***	(1.78-4.33)	372	2.77 ***	2.08	(.93-4.69)	224	1.87 **	2.04 *	(1.02-4.08)
<b>Parent Lifetime Frequency<sup>4</sup></b>												
Marijuana use in lifetime (vs. never)	6,379	2.28 ***	1.75 ***	(1.28-2.39)	3,210	4.22 ***	2.68 **	(1.46-4.93)	1,952	2.48 ***	2.55 ***	(1.54-4.23)
1-10 times	1,718	2.93 ***	1.87 ***	(1.36-2.58)	1,799	2.84 **	2.84 **	(1.48-5.53)	505	2.32 ***	2.26 ***	(1.41-3.62)
11-99 times	634	2.12 ***	1.43	(.81-2.54)*	694	1.90	.90	(.40-2.01)	804	2.29 *	1.47	(.71-3.04)
100+ times	701	3.60 ***	2.28 **	(1.39-3.73)*	3,362	2.83 ***	1.13	(.52-2.46)	535	2.85 ***	1.70	(.87-3.35)
Cigarette (vs. never)	2,517	1.42 *	1.15	(.71-1.85)*	4,412	2.05 **	1.53	(.76-3.07)*	1,177	1.40	1.26	(.62-2.58)
Former	3,284	1.49	1.41	(.72-2.74)*	134	2.73 *	4.63 *	(1.23-17.39)*	2,658	1.50	1.35	(.54-3.39)
Last year	6,345	2.26 **	2.47 **	(1.36-4.48)*	93	3.89 **	4.77 **	(1.74-13.08)*	148	1.88 *	1.92	(.80-4.58)
Alcohol (vs. never)	1,364	1.42 *	1.15	(.71-1.85)*	309	2.05 **	1.53	(.76-3.07)*	804	1.40	1.26	(.62-2.58)
Former	1,754	1.49	1.41	(.72-2.74)*	134	2.73 *	4.63 *	(1.23-17.39)*	535	1.50	1.35	(.54-3.39)
Last year	6,345	2.26 **	2.47 **	(1.36-4.48)*	93	3.89 **	4.77 **	(1.74-13.08)*	1,177	1.88 *	1.92	(.80-4.58)
Cocaine use in lifetime (vs. never)	8,535	1.42 *	1.15	(.71-1.85)*	309	2.05 **	1.53	(.76-3.07)*	804	1.40	1.26	(.62-2.58)
1-10 times	505	1.49	1.41	(.72-2.74)*	134	2.73 *	4.63 *	(1.23-17.39)*	2,658	1.50	1.35	(.54-3.39)
11-99 times	228	2.26 **	2.47 **	(1.36-4.48)*	93	3.89 **	4.77 **	(1.74-13.08)*	148	1.88 *	1.92	(.80-4.58)
100+ times	183	2.26 **	2.47 **	(1.36-4.48)*	93	3.89 **	4.77 **	(1.74-13.08)*	81	1.88 *	1.92	(.80-4.58)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Results for missing categories are not shown but are displayed in the Appendix Tables.

<sup>a,b</sup> Comparisons across categories of use for each drug: odds ratios with different superscripts are significantly different from each other, Wald F-test ( $p < .05$ ). \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.7. (Cont'd) Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Use of Four Substances<sup>1,2</sup>  
(NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<u>Parent Past Year Frequency<sup>4</sup></u>												
Marijuana use in past year (vs. never)	6,379	1.61 ***	2.37 ***	(1.79-3.13)	3,210	2.24 ***	1.91 *	(1.16-3.14)	1,952	1.77 ***	1.57 *	(1.04-2.38)
Former, not past year	2,512	1.69 *	2.66 ***	(1.53-4.65)	1,449	2.86 ***	1.74	(.62-4.92)	851	1.84	1.34	(.56-3.22)
1-200 days	439	2.06	3.06 *	(1.25-7.51)	267	3.10	3.10	(.38-25.13)	139	4.42 **	3.91 *	(1.05-14.50)
200+ days	61				31				26			
Cigarette use in past month (vs. never)	2,517	2.28 ***	1.76 ***	(1.29-2.41)	1,435	3.23 ***	2.84 **	(1.43-4.87)	804	2.41 ***	2.44 ***	(1.47-4.04) <sup>a</sup>
Former, not past month	3,599	2.39 ***	1.70 **	(1.16-2.50)	1,898	2.94 ***	2.39 *	(1.16-4.94)	1,055	2.53 ***	2.32 **	(1.41-3.82) <sup>a</sup>
<15 cigarettes/day	1,735	3.66 ***	2.11 ***	(1.48-3.00)	823	5.51 ***	3.73 ***	(1.82-7.64)	653	2.78 ***	2.87 **	(1.48-5.58) <sup>a</sup>
16-35 cigarettes/day	1,274	3.21 ***	1.63	(.79-3.37)	634	6.83 ***	3.83	(.77-19.03)	363	.81	.57	(.11-2.88) <sup>b</sup>
>35 cigarettes/day	230				98				62			
Alcohol use in past month (vs. never)	1,364	2.32 ***	1.60	(.95-2.68)	694	2.11	.94	(.43-2.03)	520	2.10 *	1.19	(.59-2.39)
Former, not past month	3,356	2.82 ***	1.93 *	(1.14-3.26)	1,817	2.96 **	1.19	(.53-2.68)	998	2.95 ***	1.72	(.83-3.55)
<2 drinks/day	3,293	4.08 ***	2.04	(.99-4.23)	2,015	4.78 **	1.13	(.37-3.44)	1,096	3.67 **	2.66	(.98-7.22)
2+ drinks/day	370				232				116			
Cocaine (vs. never)	8,535	1.39 *	1.37	(.91-2.08)	4,412	2.20 **	2.23 *	(1.05-4.73)	2,658	1.39	1.35	(.77-2.36)
Former	722	2.33 **	1.93	(.87-4.30)	427	3.42 **	3.67	(.89-15.10)	254	2.57 *	3.29	(.93-11.64)
Last year	206				118				56			

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC; unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Results for missing categories are not shown but are displayed in the Appendix Tables.

<sup>a-b</sup> Comparisons across categories of use for each drug: odds ratios with different superscripts are significantly different from each other, Wald F-test ( $p < .05$ )

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Sources: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table 6.8. Perceived Risk of Marijuana Use by Parental Birth Cohort Exposure to the Marijuana Epidemic<sup>1</sup> (NHSDA 1991-1994A Parent-Child Dyads, N=4957)

Perceived Marijuana Risk	Pre Baby Boom Pre Epidemic	Pre Epidemic Low Incidence	Low Incidence	Low High Incidence	High Incidence	High Incidence High Prevalence	High Prevalence	Post Baby Boom Post Epidemic
Occasional Use Great risk (%)	51.9 <sup>a</sup>	36.4 <sup>b</sup>	45.0 <sup>c</sup>	44.3 <sup>cd</sup>	39.7 <sup>bd</sup>	41.1 <sup>bc</sup>	48.0 <sup>abc</sup>	30.7 <sup>abc</sup>
Regular Use Great risk (%)	83.9 <sup>a</sup>	74.3 <sup>b</sup>	77.2 <sup>b</sup>	74.6 <sup>b</sup>	74.7 <sup>b</sup>	72.2 <sup>b</sup>	66.6 <sup>b</sup>	54.6 <sup>b</sup>
Total N	983	579	1,097	723	924	528	87	36

<sup>1</sup> Weighted estimates, unweighted N's.

<sup>a-d</sup> Z-test for the percentage differences across parental birth cohort groups. Percentages with different superscripts are significantly different from each other,  $p \leq .05$ .

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

## CHAPTER 7: CONCLUSION

Several findings are noteworthy. The most important is the relatively small size of the univariate effects of parental marijuana use on the child's marijuana use. The average unadjusted odds ratios of the association between child and parental marijuana use were 1.6-1.7. Odds ratios adjusted for parent and child sociodemographics increased to 2.8. Lifetime and last year marijuana use of the older children 18 to 25 years old tended to be as highly and in some cases more highly associated with parental last year marijuana use than did use by younger children 12 to 17 years old. Most of the parental effects appeared to be those of lifetime use, and did not depend either on recency or extensiveness of use. The lack of variation suggests that the influence of parental marijuana use on children's use does not result primarily from role modeling of the parent by the child. There were no statistically significant differences in parental effects between mothers and fathers, and sons and daughters.

The hypothesis regarding the impact of parental membership in the baby boom generation on offspring marijuana use was not confirmed. There was no systematic effect of membership in the baby boom generation on children's marijuana use. Although there were differences in patterns of influence within the baby boom cohorts, the cohorts who experienced the highest levels of exposure to the marijuana epidemic had the lowest levels of influence on their children. Pre-baby boomers were similar to the oldest baby boom cohorts.

It is important to keep in mind that the conclusions of this report are affected to some extent by the fact that known important predictors of adolescent marijuana use, particularly peer drug use, could not be taken into account in the analysis.

The most important findings are summarized below.

- Parental membership in the baby boom generation (1946-1964 birth cohorts) did not account for the differential rates of children's marijuana use.
- Lifetime marijuana use rates among parents of youths and young adults approximately doubled from 1979 to 1994, reflecting the increasing dominance of the baby boom cohort among parents. However, most of this increase occurred during the 1980's, a period in which youth and young adult drug use rates were declining.
- During the period of rapid increase in youth marijuana use (1992 to 1995), the percent of parents who were baby boomers or who had ever used marijuana did not change enough to have been a major factor in the youth increase.

- Parental lifetime and last year marijuana use increased the risk that a child would ever use marijuana. Controlling for parent and child sociodemographic characteristics, the children of parents who ever used marijuana were about three times as likely to have ever used marijuana as the children of parents who never used the drug. With additional control for attitudinal and behavioral characteristics, the risk declined to about two.
- Parents who stopped using marijuana and those who were currently using marijuana had children who used marijuana at similar rates (e.g., 22%-27% lifetime use). This suggests that parental influence does not reflect imitation of the parent by the child but the effect of the parent having chosen to become a marijuana user.
- The influence of parental marijuana use on child lifetime marijuana use was similar for mothers and fathers, and sons and daughters.
- Parental influence on child marijuana use did not vary among racial/ethnic groups, after controlling for parent and child characteristics.
- Parental use of cigarettes, alcohol and cocaine each independently increased the risk that a child will use marijuana over and beyond the influence of parental use of marijuana.
- Parents who perceived little risk associated with marijuana use had children with similar beliefs. In addition, parental attitudes had an indirect effect on the child's use through the child's own attitudes.
- Adolescent attitudes had the strongest association with adolescent marijuana use of any of the three adolescent characteristics that were examined. Adolescents who perceived no risk or slight risk in occasional marijuana were twelve times more likely to have used marijuana in the last year than adolescents who perceived great risk.
- The association between adolescent marijuana use and attitudes about the lack of harm associated with marijuana use was five times as strong as the association between adolescent and parental use.
- Adolescent delinquency had a strong association with adolescent marijuana use and attitudes about the lack of harm associated with marijuana use.
- The association between adolescent delinquency and marijuana use was four times as strong as the association between adolescent and parental use.

- Adolescents who dropped out of school were significantly more likely to use marijuana than non-dropouts.
- Externalizing behavioral problems (e.g., aggression, delinquency) were more strongly associated with adolescent marijuana use than were internalizing problems (e.g., anxiety, depression).
- Sociodemographic characteristics, including ethnicity, parental education and marital status, were weakly associated with adolescent marijuana use.
- Predicted changes in rates of adolescent marijuana use were estimated from assumed changes in parental behaviors, parental attitudes and adolescent attitudes.
  - If 100 parents reduced their marijuana use from 1 to 2 days a year to not using at all, 7 adolescents would decrease their marijuana use from 6 times to 3 times a month.
  - If 100 parents changed their perceptions about the harmfulness of occasional marijuana use from moderate to great risk, 4 adolescents would decrease their marijuana use from 6 times to 3 times a month.
  - If 100 parents changed their perceptions about the harmfulness of occasional marijuana use from moderate to great risk, 13 adolescents would similarly change their perceptions.
  - If 100 adolescents changed their perceptions about the harmfulness of occasional marijuana use from moderate to great risk, 36 would decrease their marijuana use from 6 times to 3 times a month.

## TECHNICAL APPENDIX: CONSTRUCTION OF DRUG USE AND OTHER VARIABLES

### A.1 Drug Use Variables

The format of the drug use variables varied across the survey years 1979-1996 included in this report. Major changes were introduced in 1988 and 1994B.

#### A.1.a Marijuana Use Variables

*Parent and child lifetime marijuana use (MRJFLAG).* Recoded binary variable was derived from the *imputed* marijuana recency variable (IRMJRC). The latter was based on the original recency of marijuana use question (MJREC), "When was the most recent time that you used marijuana or hash(ish)?" In 1979, MJREC consisted of eight categories: (91) never used marijuana; (1) used within the past week; (2) used within the past month; (3) used within the past six months; (4) used six months to a year ago; (5) used more than a year ago; (6) used more than two years ago; (7) used more than five years ago. In 1982, five categories: (91) never used marijuana; (1) used within the past month (30 days); (2) used within the past six months (but more than a month ago); (3) used six months to a year ago; (4) used more than a year ago. In 1988 and 1990-1994A, seven categories: (91) never used marijuana; (1) used within the past week; (2) used more than one week ago but less than one month ago; (3) used more than one month ago but less than six months ago; (4) used more than six months ago but less than one year ago; (5) used more than 1 year ago but less than 3 years ago; and (6) used 3 or more years ago. In 1994B-1996: (91) never used marijuana; (1) used more than one week ago but less than one month ago; (2) used more than one month ago but less than 12 months ago; (3) used more than 12 months ago but less than 3 years ago; (4) used 3 or more years ago. For *Lifetime marijuana use*, category (91) was coded 0=never used; all other categories were coded 1=ever used.

*Parent and child past year marijuana use (MRJYRX and MRJYR).* For parents, a trichotomous variable (*MRJYRX*) was derived from the *imputed* marijuana recency variable (IRMJRC) and original recency of marijuana use question (MJREC). In all survey years, category (91) of IRMJRC was coded 0=never used marijuana; in 1979, categories (5) through (7); in 1982, category (4); in 1988 and 1990-1994A, categories (5) and (6); and for 1994B-1996, categories (3) and (4) were coded 1=former use, not in the past year. In 1979, categories (1) through (4); in 1982, categories (1) through (3); in 1988 and 1990-1994B categories (1) through (4); and in 1994B-1996, categories (1) and (2) were coded 2=used in the past year. For parents and children a binary variable (*MRJYR*) was also constructed from IRMJRC. For 1979 categories (91) and (5) through (7) were coded 0=did not use marijuana in the past year;



categories (1) through (4) were coded 1=used in the past year. In 1982, categories (91) and (4) were coded 0; categories (1) through (3) were coded 1. In 1990-1994B, categories (91), (5) and (6) were coded 0=did not use in the past year, and categories (1) through (4) were coded 1. In 1994B-1996, categories (91), (3) and (4) were coded 0; categories (1) and (2) were coded 1.

*Parent frequency of lifetime marijuana use (MJTOTX).* Recoded, based on the original variable MJTOT. In 1979 and 1982, five categories: (91) never used marijuana; (1) used 1 or 2 times lifetime; (2) used 3-10 times lifetime; (3) used 11-99 times lifetime; (4) used 100 or more times lifetime. In 1988 and 1990-1994A, eight categories: (91) never used marijuana lifetime; (1) used 1-2 times lifetime; (2) used 3-5 times lifetime; (3) used 6-10 times lifetime, (4) used 11-49 times lifetime; (5) used 50-99 times lifetime; (6) used 100-199 times lifetime; (7) used 200 or more times lifetime. In 1994B-1996, six categories: (91) never used marijuana; (1) used more than 300 days; (2) used at least 101 but not more than 30 days; (3) used at least 12 but not more than 100 days; (4) used at least 3 but not more than 11 days; (5) used at least 1 but not more than 2 days. Recoded to 4 categories (MJTOTX). In all survey years category (91) was coded 0=never used marijuana; in 1979 and 1982 categories (1) and (2); in 1988 and 1990-1994A categories (1) through (3); and in 1994B-1996 categories (4) and (5) were coded 1=used 1-10 times/days lifetime. In survey years 1979 and 1982 category (3); for 1988 and 1990-1994A categories (4) and (5); and in 1994B-1996 category (3) was coded 2=used 11-99 times/days lifetime. In 1979 and 1982 category (4); in 1988 and 1990-1994A categories (6) and (7); and in 1994B-1996 categories (1) and (2) were coded 3=used 100 or more times/days lifetime.

*Parent number of days used marijuana in the past 12 months (MJYRFRQX).* Four category recoded variable based on the *imputed* marijuana frequency variable (IRMJFQ). The latter was based on the original eleven-category frequency of use question (MJYRFREQ), "How often in the past 12 months have you used marijuana?" In 1988 and 1990-1994A: (91) never used marijuana; (93) did not use marijuana in the past 12 months; (1) used several times a day in the past 12 months; (2) used daily in the past 12 months; (3) used almost daily in the past 12 months; (4) used 1 or 2 days a week in the past 12 months; (5) used several times a month in the past 12 months (25 to 50 days); (6) used 1 to 2 times a month (12 to 24 days) in the past 12 months; (7) used every other month or so (6 to 11 days) in the past 12 months; (8) used 3 to 5 days in the past 12 months; and (9) used 1 to 2 days in the past 12 months. In 1994B-1996, selected response categories changed slightly. Categories (91), (93) and (5) through (9) did not change; category (1) became used more than 300 days in the past 12 months (5 to 6 days a week); category (2) used 201 to 300 days in the past 12 months (5 to 6 days a week); category (3) used 101 to 200 days in the past 12 months (3 to 4 days a week); and category (4) used 51 to 100 days in the past 12 months (1 to 2 days a week). Category (91) was coded 0=never used marijuana; category (93) as 1=former use, not in the past 12 months; categories (3) through (9) as 2=used 1-200 days in the past 12 months; and categories (1) and (2) as 3=used 201 or more days in the past 12 months. Available in 1988 and 1990-1996.



*Parent number of days used marijuana in the past thirty days (MJDAY3OX).* A four category variable based on the original continuous variable, "Number of days used marijuana/hashish in the past 30 days (MJDAY3OA): (91) never used marijuana; (0) no use in the past 30 days; (1) through (30) for days used in the past 30 days. Recoded: 0= never used marijuana; 1=former use, not in the past 30 days; 2=used 1-10 days in the past 30 days; 3=used 11-30 days in the past 30 days.

#### A.1.b Other Drug Use Variables (Cigarettes, Alcohol, Cocaine)

*Parent lifetime cigarette use (CIGFLAG).* Recoded binary variable derived from the imputed cigarette recency variable (IRCIGRC). The latter was based on the original recency of cigarette use question (CIGREC), "When was the most recent time you had a cigarette?" In 1979 and 1982 five categories: (91) never used cigarettes; (1) used in the past 30 days; (2) used within the past six months; (3) used within the past year; (4) used more than a year ago. In 1988, 1990-1994A: (91) never used cigarettes; (1) used within the past month; (2) used more than one month ago but less than 6 months ago; (3) used more than six months ago but less than one year ago; (4) used more than 1 year ago but less than 3 years ago; (5) used 3 or more years ago. In 1994B-1996: (91) never used cigarettes; (1) used within the past month; (2) used more than one month ago but less than one year ago; (3) used more than one year ago but less than three years ago; (4) used 3 or more years ago. Category (91) was coded 0=never used cigarettes; all other categories were coded 1=ever used.

*Parent past year cigarette use (CIGYRX).* Trichotomous variable (CIGYRX) derived from the imputed cigarette recency variable (IRCIGRC) and original recency of cigarette use question (CIGREC). In all survey years, category (91) was coded 0=never used cigarettes; in 1979 and 1982, category (4); in 1988 and 1990-1994B, categories (4) and (5); and in 1994B to 1996, categories (3) and (4) were coded 1=former use, not in the past year. In 1979 and 1982, category (4); in 1998 and 1990-1994A, categories (1) through (3); and in 1994B-1996 categories (1) and (2), were coded 2=used in the past year.

*Parent smoked at least 100 or more cigarettes in lifetime (CIG5PKX).* Variable used only in the structural equation model for survey years 1991-1994A. Recoded variable based on the original three category variable (CIGS5PK): (91) never used cigarettes; (1) smoked 100 or more cigarettes in lifetime; (2) did not smoke 100 or more cigarettes in lifetime. Categories (91) and (1) were recoded (CIG5PKX) to: 0=never used cigarettes or did not use 100 or more cigarettes in lifetime; category (2) to 1=used 100 or more cigarettes in lifetime.

*Parent number of cigarettes per day in the past 30 days (CIGMFRQX).* Recoded five category variable (CIGMFRQX) based on the original eight category daily quantity of use question variable "Number of cigarettes smoked per day in the past 30 days" (AVCIG). (81/91) never used cigarettes; (93/99) did not smoke cigarettes in the past 30 days; (1) smoked less than one cigarette per day; (2) smoked 1-5 cigarettes per day; (3) smoked 6-15 cigarettes per day; (4) smoked 16-25 cigarettes per day; (5) smoked 26-35 cigarettes per day; (6) smoked 36 or more

cigarettes per day. Category (91) was coded 0=never used cigarettes; category (93/99) as 1=former use, not in the past 30 days; categories (1) through (3) as 2=smoked 1-15 cigarettes per day; categories (4) and (5) as 3=smoked 16-35 cigarettes per day; category (6) as 4=smoked 36 or more cigarettes per day.

*Parent number of cigarettes smoked daily (PACKSX).* Variable used only in the structural equation model for survey years 1991-1994A. Six category recoded variable, number of cigarettes smoked per day as a daily smoker (PACKS): (91) never smoked cigarettes; (1) smoked 1-5 cigarettes per day; (2) smoked 6-15 cigarettes per day; (3) smoked 16-25 cigarettes per day; (4) smoked 26-35 cigarettes per day; (5) smoked 35 or more cigarettes per day. For analytical purposes category (91) was recoded to 0; all other categories remained the same.

*Parent lifetime alcohol use (ALCFLAG).* Recoded binary variable derived from the *imputed* alcohol recency variable (IRALCRC). The latter was based on the original recency of alcohol use question (ALCREC), "How long has it been since you last drank an alcoholic beverage?" In 1979, eight categories: (91) never used alcohol; (1) used within the past week; (2) used within the past month; (3) used within the past six months; (4) used six months to a year ago; (5) used more than a year ago; (6) used more than two years ago; (7) used more than five years ago. In 1982, five categories: (91) never used alcohol; (1) used within the past month; (2) used within the past six months; (3) used six months to a year ago; (4) used more than a year ago. In 1988 and 1990-1994A, six categories: (9) never used alcohol; (1) used within the past month; (2) used more than one month ago but less than 6 months ago; (3) used more than six months ago but less than one year ago; (4) used more than 1 year ago but less than 3 years ago; (5) used 3 or more years ago. In 1994B-1996, five categories: (9) never used alcohol; (1) used within the past month; (2) used more than one month ago but less than one year ago; (3) used more than one year ago but less than 3 years ago; (4) used 3 or more years ago. Category (9) was coded 0=never used alcohol; all other categories were coded 1=ever used.

*Parent past year alcohol use (ALCYRX).* Trichotomous variable (ALCYRX) derived from the *imputed* alcohol recency variable (IRALCRC) and original recency of alcohol use question (ALCREC). In all survey years, category (9) of IRALCRC was coded 0=never used alcohol. In 1979, categories (5) through (7); in 1982, category (4); in 1988 and 1990-1994A categories (4) and (5); and in 1994B-1996, categories (3) and (4) were coded 1=former use, not in the past year. In 1979, categories (1) through (5); in 1982, categories (1) through (3); in 1988 and 1990-1994A, categories (1) through (3); and in 1994B-1996, categories (1) and (2) were coded 2=used in the past year.

*Parent frequency of past year alcohol use (IRALCFQX).* Variable used only in the structural equation model for survey years 1991-1994A. Imputed variable, based on the nine category variable (IRALCFQ): (1) used daily in the past year; (2) used almost daily in the past year; (3) used 1-2 days per week in the past year; (4) used several times a month in the past year; (5) used 1-2 times a month in the past year; (6) used every other month in the past year; (7) used 3-5 times in the past year; (8) used 1-2 times in the past year; (9) never used alcohol or did not

use in the past year. Categories (9) through (1) were recoded from low to high use (IRALCFQX): 0=never used alcohol to 9=used daily in past the year.

*Parent number of times very high or drunk on alcohol in the past 12 months (DRUNKYRX).* Variable used only in the structural equation model for survey years 1991-1994A. Recoded ten category variable (DRUNKYRX) based on the original eleven category variable (DRUNKYR): (1) got very high or drunk daily in the past 12 months; (2) got very high or drunk three to six days a week in the past 12 months; (3) got very high or drunk one or two days a week in the past 12 months; (4) got very high or drunk 25-51 days in the past 12 months; (5) got very high or drunk 12 to 24 days in the past 12 months; (6) got very high or drunk 6 to 11 days in the past 12 months; (7) got very high or drunk 3 to 5 days in the past 12 months; (8) got very high or drunk 1 or 2 days in the past 12 months; (9) did not get very high or drunk in the past 12 months; (91) never used alcohol; (93) did not use alcohol in the past 12 months. Categories (91) and (93) were coded 0; categories (9) through (1) were reverse coded from low to high use: 1=did not get very high or drunk in the past 12 months to 9=got very high or drunk daily in the past 12 months.

*Parent quantity/frequency of alcohol use in the past 30 days (ALCMFRQX).* Categorical variable derived from the frequency of alcohol use variable (ALCDAYS), "On about how many different days did you have one or more drinks of beer, wine or liquor during the past 30 days?", and the number of alcohol drinks per day in the past 30 days variable (NODR30A), "About how many drinks of beer, wine or liquor did you usually have in a day on the days that you drank during the past 30 days?" A continuous measure of current average daily alcohol intake (average number of drinks per day) was the product of the frequency of days drank in the past month (ALCDAYS) and number of drinks consumed per day (NODR30A), divided by 30. Four categories were derived: 0=never used alcohol; 1=former use, not in the past 30 days; 2=used less than 2 drinks per day in the past 30 days; 3=used 2 or more drinks per day in the past 30 days. Available in 1988 and 1990-1996.

*Parent lifetime cocaine use (COCFLAG).* Recoded binary derived from the *imputed* cocaine recency variable (IRCOCRC). The latter was based on the original recency of cocaine use question (COCREC), "When was the most recent time that you used cocaine, in any form"? In 1979, seven categories: (9) never used cocaine; (1) used within the past week; (2) used within the past month; (3) used within the past six months; (4) used six months to a year ago; (5) used more than 1 year ago; (6) used more than 2 years ago; (7) used more than 5 years ago. In 1982, five categories: (9) never used cocaine; (1) used in the past month; (2) used in the past six months; (3) used six months to a year ago; (4) used more than a year ago. In 1988 and 1990-1994A, seven categories: (91) never used cocaine; (1) used within the past week; (2) used more than 1 week ago but less than 1 month ago; (3) used 1 or more months ago but less than 6 months ago; (4) used 6 or more months ago but less than a year ago; (5) used 1 or more years ago but less than 3 years ago; (6) used 3 or more years ago. In 1994B-1996 five categories: (9) never used cocaine; (1) used within the past 30 days; (2) used more than 30 days ago but within the past 12 months; (3) used more than 12 months ago but within the past 3 years; (4) used more

than 3 years ago. In all survey years, category (9) was coded 0=never used; all other categories were coded 1=ever used.

*Parent past year cocaine use (COCYRX).* Trichotomous variable (COCYRX) derived from the *imputed* cocaine recency variable (IRCOCRC) and recency of cocaine use question (COCREC). In all survey years, category (9) of IRCOCRC, was coded 0=never used. In 1979, categories (5) through (7); in 1982 category (4); in 1988 and 1990-1994A categories (5) and (6); and in 1994B-1996, categories (3) and (4) were coded 1=former use, not in the past year. In 1979, categories (1) through (4); in 1982 categories (1) through (3); in 1988 and 1990-1994A categories (1) through (4); and in 1994B-1996 categories (1) and (2) were coded 2=use in the past year.

*Parent frequency of lifetime cocaine use (COCTOTX1 and COCTOTX2).* Two variables were constructed. a four category version for the logistic regression models and an eight category version for the structural equation models. In 1979 and 1982, four categories: (91) never used cocaine; (1) used 1 or 2 times; (2) used 3 to 10 times; (3) used 11 to 99 times; (4) used 100 or more times. In 1988 and 1990-1994A, eight categories: (91) never used cocaine; (1) used 1 or 2 times; (2) used 3 to 5 times; (3) used 6 to 10 times; (4) used 11 to 49 times; (5) used 50 to 99 times; (6) used 100 to 199 times; (7) used 200 or more times. In 1994B-1996, six categories: (91) never used cocaine; (1) used more than 300 days; (2) used at least 101 but not more than 300 days; (3) used at least 12 but not more than 100 days; (4) used at least 3 but not more than 11 days; (5) used at least 1 but not more than 2 days.

In the four category version (COCTOTX1), in all survey years, category (91) was coded 0=never used marijuana. In 1979 and 1982, categories (1) and (2); in 1988 and 1990-1994A, categories (1) through (3); and in 1994B-1996 categories (4) and (5) were coded 1=used cocaine 1-10 times/days in lifetime. In 1979 and 1982, category (3); in 1988 and 1990-1994A, categories (4) and (5); and in 1994B-1996, category (3) were coded 2=used cocaine 11-99 times/days in lifetime. In 1979 and 1982, category (4); in 1988 and 1990-1994A categories (6) and (7); and in 1994B-1996 categories (1) and (2) were coded 3=used cocaine 100 or more times/days in lifetime. In the eight category version (COCTOTX2), used only the 1991-1994A surveys, category (91) was coded 0=never used cocaine; all other categories remained the same.

*Parent frequency of past year cocaine use (IRCOCFQX).* Variable used only in the structural equation model for survey years 1991-1994A. *Imputed* nine category variable (IRCOCFQ): (9) never used or did not use in the past year; (1) used daily in the past year; (2) used almost daily in the past year; (3) used 1-2 days per week in the past year; (4) used several times per month in the past year; (5) used 1-2 times per month in the past year; (6) used every other month in the past year; (7) used 3-5 times in the past year; (8) used 1-2 times in the past year. Recoded (IRCOCFQX): category (9) was coded 0; categories (1) through (8) were reverse coded from low to high use, 1=used 1-2 times in the past year to 8=used daily in the past year.

## A.2 Other Variables

### A.2.a Sociodemographic Variables

*Parent and child education (EDUCCT2X).* Recoded variable, five categories. For parents and children aged 18-25, the original response categories for EDUCCT2 were retained: 1=less than high school/dropout; 2=high school graduate; 3=some college; 4=college graduate. For children aged 12-17, the school enrollment (YTHSTUD in 1979 and 1982; ENROLLD in 1988 and 1990-1996) and last grade completed (YTHEDUC in 1979 and 1982; EDUC in 1988 and 1990-1996) variables were used to assign children to one of the four categories of EDUCCT2 or to a fifth category labeled "in secondary school."

*Child school dropout (CDRPOUTX).* Constructed variable based on the recoded variable EDUCCT2X: 1=less than high school/dropout; 2=high school graduate; 3=some college; 4=college graduate; 5=in secondary school. Categories (2) through (4) were coded 0=not a dropout; category (1) as 1=dropout.

### A.2.b Personal Characteristic Variables

*Parent depression in past 12 months (MDE1).* Major depressive episode Version 1 based on MDESFS1. Two sets (1 and 2) of parallel questions were used to determine MDESFS1. Respondents were administered either set 1 or set 2 of the depression items. In set 1, ten items were used to construct MDESFS1. For item set 1, if a respondent reported near daily or daily feelings of depression (DEPFREQ=1 or 2) that lasted most or all of the day (DEPDAY=1 or 2) for a period of two weeks or more (DEPRESS=1), MDESFS1 was coded 1. Seven additional binary items, the loss of interest (LOSTINT1; 0=no, 1=yes), excessive fatigue (TIRED1; 0=no, 1=yes), gained or lost ten or more pounds in the past 12 months (LBSCHNG1; 0=no, 1=yes), frequency of sleeping problems (SLPFREQ1; 0=less often; 1=nearly every or every night), trouble concentrating (CONCEN1; 0=no; 1=yes), feelings of worthlessness (DOWN1; 0=no, 1=yes), and thoughts of death (IDEAT1; 0=no, 1=yes) were summated. Scores for MDESFS1 ranged from 0-8.

For item set 2, nine items were used to construct MDESFS1. If the respondent did not report a two week or greater period of depression, but reported a near daily or daily loss of interest in things (LOSINFRQ=1 or 2) for most or all of the day (LOSINDAY=1 or 2) in the past 12 months (LOSTINT2=1), MDESFS1 was coded 1. Six additional binary items (TIRED2, LBSCHNG2, SLPFREQ2, CONCEN2, DOWN2, IDEAT2) were summated. For item set 2, scores for MDESFS1 ranged from 0-7. For item sets 1 and 2, a score of  $\geq 3$  for MDESFS1 indicated a major depressive episode: 0=probable non-case; 1=probable case. Available in 1994B-1996.

*Parent anxiety in past 12 months (GADI).* Generalized anxiety disorder Version 1 (GADI) based on GADSFS1. If a respondent reported a current period of anxiety (WOREND=2)



that has been going on for six months or more (WORMON2) or a past period of anxiety (WOREND=1) that lasted six months or more (WORNOM1) in the past 12 months, and the respondent worried about things that were not likely to happen (WORHAPN1=1 or WORHAPN2=1), that were not serious (WORSERI1=1 or WORSERI2=1), and worried about different things simultaneously (WORDIFF1=1 or WORDIFF2=1), GADSFS1 was coded 1. Six additional binary items, restless when worried (WORREST; 0=no, 1=yes), keyed up or on edge when worried (WOREDGE; 0=no, 1=yes) irritable when worried (WORIRRIT; 0=no, 1=yes), heart pounds/races when worried (WORHEART; 0=no, 1=yes), easily tired when worried (WORTIRED; 0=no, 1=yes), trouble falling asleep when worried (WORSLEEP; 0=no, 1=yes) and feel faint when worried (WORFAINT; 0=no, 1=yes) were summated. Scores for GADSFS1 ranged from 0-7. A score of  $\geq 3$  indicated an episode of generalized anxiety disorder: 0=non-probable case; 1=probable case. Available in 1994-1996.

*Parent and child delinquency in past 12 months (DELQX).* Constructed additive variable based on 12 items: “During the past 12 months, have you” (1) “taken something from a store without paying for it?” (STRSTEAL); (2) “taken money or property that did not belong to you?” (OTHSTEAL); (3) “purposely damaged or destroyed property that did not belong to you?” (DAMAGE); (4) “taken a car that didn’t belong to someone in your family without the owner’s permission?” (CARSTEAL); (5) “used a weapon, force, or strong arm methods to get money or things from a person?” (FORCEMON); (6) “broken into a house or building to steal something or just to look around?” (BREAKIN); (7) “hit someone or gotten into a physical fight?” (PHYFIGHT); (8) “hurt someone badly enough to need bandages or a doctor?” (HURTBAD); (9) “used a knife or gun or some other thing to get something from a person?” (GUNMONEY); (10) “driven any kind of vehicle while you were under the influence of alcohol or illegal drugs?” (DRUNKDRV); (11) “sold any illegal drugs?” (SOLDDRUG); (12) “done anything else that would have gotten you into trouble with the police if they had known about it?” (OTHDOING). Scores ranged from 0-12. Available in 1991-1994A and 1995.

# APPENDIX TABLES

Table A.3.1. Percentage of NHSDA Respondents Aged 12-25 Included in Parent-Child Dyads by Age<sup>1</sup>  
(NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Age Group	1979-1996 %	1979 %	1982 %	1988 %	1990 %	1991 %	1992 %	1993 %	1994A %	1994B %	1995 %	1996 %
<b>12-14 years</b>												
Total N age group	20.8 23,089	34.9 1,012	28.0 779	11.0 1,439	10.2 1,057	19.5 3,976	25.7 3,658	18.9 3,590	19.0 591	18.4 2,431	20.7 2,324	23.5 2,232
<b>15-17 years</b>												
Total N age group	15.6 23,117	29.5 1,153	17.2 802	7.8 1,656	6.9 1,120	15.9 4,029	18.2 3,596	13.2 3,388	15.5 528	12.2 2,267	17.3 2,271	17.5 2,307
<b>18-25 years<sup>2</sup></b>												
Total N age group	3.1 34,126	- -	- -	- -	- -	2.9 7,937	3.6 7,721	1.5 5,531	3.9 902	4.2 3,706	1.9 3,963	4.8 4,366

<sup>1</sup> Unweighted estimates and N's.

<sup>2</sup> Restricted to NHSDA 1991-1996. NHSDA 1979, 1982, 1988 and 1990 do not include parent-child dyads with a child aged 18-25.  
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.3.2. Prevalence of Marijuana Use by Age: NHSDA 1994A and 1994B<sup>1</sup>

Age Group	Lifetime		Last Year		Last Month	
	1994A %	1994B %	1994A %	1994B %	1994A %	1994B %
Total	34.1	31.2	9.2	8.5	4.7	4.8
12-17	16.0	13.6	13.6	11.4	7.3	6.0
18-25	43.4	41.9	23.4	21.8	12.2	12.1
26-34	56.9	52.7	14.3	11.5	6.3	6.9
35+	28.4	25.4	3.6	4.1	2.0	2.4

<sup>1</sup>Source: SAMHSA (1996a;1996b).

Table A.4.1. Sample Sizes and Age Distributions of Adolescents and Young Adults in Parent-Child Dyads, Children Aged 12-25<sup>1,2</sup> by Survey Year (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Age	1979-1996		1979		1982		1988		1990		1991		1992		1993		1994A		1994B		1995		1996	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
12	1,703	16.2	125	18.3	95	22.6	47	14.8	34	14.1	269	15.6	361	14.0	230	17.7	31	11.5	156	14.8	170	16.6	185	15.6
13	1,621	15.6	97	15.2	71	17.3	54	18.2	38	19.4	284	14.0	289	15.8	251	18.0	48	20.1	149	16.6	172	15.2	168	12.4
14	1,470	15.6	131	17.4	52	12.9	58	18.3	36	24.6	221	14.3	289	16.6	199	14.2	33	13.5	142	16.0	138	12.7	171	16.8
15	1,262	13.8	127	18.1	54	16.2	33	11.1	29	19.2	217	14.7	225	11.8	172	15.4	28	15.6	101	10.5	140	11.3	136	11.9
16	1,273	15.4	115	16.9	59	19.8	53	18.2	24	10.1	221	15.1	235	12.8	162	18.1	28	10.0	88	11.6	136	19.4	152	15.4
17	1,063	12.1	98	14.1	40	11.3	43	19.0	24	12.6	203	10.2	195	10.8	114	10.8	26	16.4	87	11.8	117	17.4	116	10.2
18	248	2.7	-	-	-	-	1	.3	-	-	44	2.6	61	4.4	20	1.6	13	6.3	39	5.1	19	1.5	51	4.2
19	189	1.7	-	-	-	-	-	-	-	-	43	3.4	45	1.9	12	.9	2	.7	32	3.8	8	.5	47	3.7
20	155	1.7	-	-	-	-	-	-	-	-	36	2.5	35	2.7	14	.6	7	2.4	19	2.2	16	1.8	28	3.0
21	120	1.4	-	-	-	-	-	-	-	-	19	.9	35	2.8	12	1.2	5	1.2	26	3.0	7	.8	16	1.2
22	113	1.5	-	-	-	-	-	-	-	-	24	2.2	37	3.1	8	.7	2	.3	13	1.2	6	.4	23	2.2
23	99	1.0	-	-	-	-	-	-	-	-	22	1.6	29	1.7	10	.3	2	.7	13	2.0	5	.3	18	1.0
24	73	.6	-	-	-	-	-	-	-	-	17	1.2	18	.7	6	.3	2	.4	10	1.0	7	1.2	13	.8
25	74	.8	-	-	-	-	-	-	-	-	26	1.7	15	1.1	3	.0	2	1.0	5	.5	8	.9	15	1.5
Total N	9,463		693		371		289		185		1,646		1,869		1,213		229		880		949		1,139	

<sup>1</sup> Weighted estimates, unweighted N's.

<sup>2</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.1. Prevalence of Child Lifetime and Last Year Marijuana Use Among Children Aged 12-25<sup>1,2</sup> in Parent-Child Dyads, by Child Age, Sex and Ethnicity by Survey Year (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

	1979-1996 %	1979 %	1982 %	1988 %	1990 %	1991 %	1992 %	1993 %	1994A %	1994B %	1995 %	1996 %
<b>Lifetime Use</b>												
<b>Child Age<sup>3</sup></b>												
12-14 years	5.4 <sup>a</sup>	13.4	6.3	4.9	12.5	2.6	3.2	2.2	8.9	2.9	2.5	5.1
15-17 years	26.7 <sup>b</sup>	46.1	46.0	13.2	21.3	21.3	18.7	16.1	15.9	18.7	25.3	23.5
18-25 years <sup>4</sup>	40.1	-	-	-	-	40.3	38.4	49.5	47.5	54.7	49.0	27.7
12-17 years	15.1	29.8	24.5	9.2	15.7	11.5	9.2	8.6	12.4	8.7	15.8	13.0
<b>Child Sex</b>												
Male	19.4 <sup>a</sup>	29.0	28.5	8.0	9.2	18.6	17.3	12.0	19.1	16.2	19.3	16.4
Female	16.5 <sup>b</sup>	29.6	22.7	9.9	19.4	13.7	12.9	9.9	13.0	18.4	13.8	15.5
<b>Child Ethnicity</b>												
White	18.8	30.2	23.9	22.9	45.8	17.4	15.6	9.8	14.6	17.1	18.9	15.4
African-American	16.4	28.4	30.4	5.8	4.1	12.8	14.0	13.5	25.4	16.0	13.1	16.7
Hispanic	17.0	18.3	32.9	11.2	13.3	17.9	14.9	17.1	17.0	21.8	13.9	16.2
<b>Last Year Use</b>												
<b>Child Age<sup>3</sup></b>												
12-14 years	4.4 <sup>a</sup>	11.3	4.3	3.2	12.5	2.2	2.4	2.0	7.2	2.5	2.4	4.4
15-17 years	20.8 <sup>b</sup>	36.1	39.0	9.9	20.2	13.2	13.1	13.7	9.7	15.6	22.2	19.0
18-25 years <sup>4</sup>	23.7	-	-	-	-	20.8	24.6	23.7	46.1	27.1	34.8	20.0
12-17 years	11.9	23.8	20.2	6.6	15.3	7.4	6.5	7.4	8.4	7.3	13.9	10.7
<b>Child Sex</b>												
Male	14.9 <sup>a</sup>	23.6	21.8	4.9	8.3	12.7	11.7	10.1	16.5	11.3	15.9	14.6
Female	11.4 <sup>b</sup>	23.1	20.1	7.6	19.4	6.6	7.3	7.4	9.0	11.1	10.7	10.9
<b>Child Ethnicity</b>												
White	13.9	23.9	19.3	11.4	44.8	9.6	9.9	8.4	12.3	10.8	15.7	12.0
African-American	12.1	23.1	27.1	3.5	4.1	8.2	8.4	10.7	17.5	10.4	10.3	14.3
Hispanic	11.9	15.4	24.0	8.7	12.7	11.8	9.6	10.1	14.5	16.0	9.8	12.1
Total N	9,463	693	371	289	185	1,646	1,869	1,213	229	880	949	1,139

<sup>1</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>2</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup> Adjusted estimates based on the 1991 distribution of child age for 12-17 and 18-25 year olds.

<sup>4</sup> NHSDA 1991-1996.

<sup>a-b</sup> For each sociodemographic variable, percentages with different superscripts are significantly different from each other, T-test ( $p \leq .05$ ). Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.2. Prevalence of Parent Lifetime and Last Year Marijuana Use in Parent-Child Dyads, by Child/Parent Age, Parent Sex and Ethnicity by Survey Year<sup>1,2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

	1979-1996 %	1979 %	1982 %	1988 %	1990 %	1991 %	1992 %	1993 %	1994A %	1994B %	1995 %	1996 %
<b>Lifetime Use</b>												
<b>Total Parents</b>	32.8	15.7	20.9	34.6	32.3	35.4	34.5	41.8	47.9	36.3	40.6	36.3
<b>Child/Parent Age</b>												
12-14/24-73 years	37.5 <sup>a</sup>	20.0	28.0	47.5	36.1	41.9	40.1	42.7	56.1	42.5	46.1	40.8
15-17/27-80 years	29.8 <sup>b</sup>	11.2	13.0	21.1	27.1	35.2	31.8	42.7	37.1	34.7	37.5	38.1
18-25/31-74 years	24.2 <sup>c</sup>	-	-	-	-	18.1	25.7	27.0	54.3	23.7	26.9	20.9
<b>Parent Sex</b>												
Male	38.9 <sup>a</sup>	20.2	19.9	40.5	44.7	41.7	42.1	54.3	52.4	42.7	43.3	44.4
Female	28.7 <sup>b</sup>	12.0	21.7	32.2	25.7	31.3	29.9	33.0	44.9	32.3	38.7	30.7
<b>Parent Ethnicity</b>												
White	34.7 <sup>a</sup>	14.9	19.8	73.8	61.3	39.7	36.0	43.6	51.1	40.7	48.6	44.1
African-American	37.3 <sup>a</sup>	27.9	33.8	43.1	44.7	39.9	40.5	49.0	39.5	30.9	34.4	33.8
Hispanic	20.5 <sup>b</sup>	.0	12.6	20.5	22.4	22.0	21.6	27.0	37.9	27.2	19.2	21.0
<b>Last Year Use</b>												
<b>Total Parents</b>	5.3	6.2	8.8	7.9	8.9	5.1	4.2	5.1	4.6	4.2	5.3	5.6
<b>Child/Parent Age</b>												
12-14/24-73 years	7.0 <sup>a</sup>	8.7	12.9	11.7	6.1	6.2	6.3	6.2	5.9	5.5	5.9	6.6
15-17/27-80 years	3.9 <sup>b</sup>	3.6	4.3	4.0	12.7	3.6	2.1	4.4	4.6	2.3	5.5	6.6
18-25/31-74 years	3.2 <sup>b</sup>	-	-	-	-	5.9	3.2	.7	.0	4.6	0.7	1.8
<b>Parent Sex</b>												
Male	7.1 <sup>a</sup>	8.0	10.7	15.4	4.9	6.0	5.8	6.8	5.4	6.6	6.9	8.7
Female	4.1 <sup>b</sup>	4.8	7.5	4.9	11.0	4.5	3.3	3.9	4.0	2.8	4.3	3.5
<b>Parent Ethnicity</b>												
White	4.8 <sup>a</sup>	5.4	6.0	0.0	29.9	3.7	4.0	3.9	2.9	4.1	5.7	6.9
African-American	8.5 <sup>b</sup>	13.5	22.2	10.3	12.6	9.0	6.1	11.8	12.4	4.7	5.6	6.1
Hispanic	3.5 <sup>a</sup>	.0	12.6	5.6	3.8	4.9	2.6	4.5	3.8	4.8	3.8	1.8
<b>Total N</b>	9,463	693	371	289	185	1,646	1,869	1,213	229	880	949	1,139

<sup>1</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>2</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>a,b</sup> For each sociodemographic variable, percentages different superscripts are significantly different from each other, T-test (p<.05).

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.3. Prevalence of Child Lifetime and Last Year Marijuana Use Among Children Aged 12-25 by Membership in Parent-Child Dyads by Survey Year<sup>1,2,3</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	1979-1996		1979		1982		1988		1990		1991	
	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %
<b>Lifetime Use</b>												
12-14 years	5.4	6.8 ***	13.4	13.6	6.3	12.4 **	4.9	5.7	12.5	5.2 *	2.6	
15-17 years	26.7	26.8	46.1	46.7	46.0	41.1	13.2	27.6 **	21.3	23.3	21.3	21.6
18-25 years <sup>4</sup>	40.1										40.3	50.7 **
12-17 years	15.1	17.1 ***	29.8	31.9	24.5	27.8	9.2	17.7	15.7	14.9	11.5	13.2
<b>Last Year Use</b>												
12-14 years	4.4	5.5 **	11.3	11.0	4.3	8.4 *	3.2	4.0	12.5	4.2 *	2.2	3.5 *
15-17 years	20.8	21.3	35.1	38.6	39.0	32.1	9.9	20.2 ***	20.2	17.5	13.2	17.9 *
18-25 years <sup>4</sup>	23.7	23.0									20.8	24.6
12-17 years	11.9	13.6	23.8	26.2	20.2	21.1	6.6	12.8 ***	15.3	11.3	7.4	10.3 **
<b>Age Specific N's</b>												
12-14 years	4,794	18,295	353	659	218	561	159	1,280	108	949	774	3,202
15-17 years	3,598	19,519	340	813	153	699	129	1,527	77	1,043	641	3,388
18-25 years <sup>4</sup>	1,070	33,056									231	7,706
12-17 years	8,392	37,814	693	1,472	371	1,260	288	2,807	185	1,992	1,415	6,590
<b>Total N</b>	<b>9,462</b>	<b>70,870</b>	<b>693</b>	<b>1,472</b>	<b>371</b>	<b>1,260</b>	<b>288</b>	<b>2,807</b>	<b>185</b>	<b>1,992</b>	<b>1,646</b>	<b>14,296</b>

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup>For parent-child dyads, adjusted estimates based on the 1991 distribution of child age for 12-17 and 18-25 year olds.

<sup>4</sup>NHSDA 1991-1996.

\* p<.05; \*\* p<.01; \*\*\* p<.001, Z-test for the percentage difference between dyad and non-dyad children for each age group within each sample.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.3 (cont'd). Prevalence of Child Lifetime and Last Year Marijuana Use Among Children Aged 12-25 by Membership in Parent-Child Dyads by Survey Year<sup>1,2,3</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	1992		1993		1994A		1994B		1995		1996	
	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %
<b>Lifetime Use</b>												
12-14 years	3.2	3.4	2.2	5.1 ***	8.9	7.9	2.9	4.9 *	2.5	8.1	5.1	6.3
15-17 years	17.9	1	16.1	19.7	15.9	22.6	18.7	23.7 *	25.3	25.8	23.5	28.0
18-25 years <sup>4</sup>	38.4	48.3 ***	49.5	47.4	47.5	43.5	54.7	41.8 **	49.0	41.4	27.7	44.4 ***
12-17 years	9.2	11.0	8.6	12.4 ***	12.4	15.5	8.7	14.2 ***	15.8	16.8	13.0	17.5 ***
<b>Last Year Use</b>												
12-14 years	2.4	2.7	2.0	4.4 ***	7.2	7.4	2.5	4.1	2.4	7.1 *	4.4	5.4
15-17 years	13.1	14.4	13.7	17.0	9.7	18.9 *	15.6	19.7	22.2	22.2	19.0	21.0
18-25 years <sup>4</sup>	24.6	27.7	23.7	22.8	46.1	23.2 **	27.1	21.7	34.8	21.8 *	20.0	24.0
12-17 years	6.5	8.6 **	7.4	10.7 ***	8.4	13.3 *	7.3	11.9 ***	13.9	14.7	10.7	13.4 *
<b>Age Specific N's</b>												
12-14 years	939	2,719	680	2,910	112	479	447	1,984	480	1,844	524	1,708
15-17 years	655	2,941	448	2,940	82	446	276	1,991	393	1,878	404	1,903
18-25 years <sup>4</sup>	275	7,446	85	5,446	35	867	157	3,549	76	3,887	211	4,155
12-17 years	1,594	5,660	1,128	5,850	194	925	723	3,975	873	3,722	928	3,611
<b>Total N</b>	1,869	13,106	1,213	11,296	229	1,792	880	7,524	949	7,609	1,139	7,766

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>3</sup>For parent-child dyads, adjusted estimates based on the 1991 distribution of child age for 12-17 and 18-25 year olds.

<sup>4</sup>NHSDA 1991-1996.

\* p<.05; \*\* p<.01; \*\*\*p<.001, Z-test for the percentage difference between dyad and non-dyad children for each age group within each sample.  
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.4. Prevalence of Parent Lifetime and Last Year Marijuana Use Among Parents by Membership in Parent-Child Dyads, by Child/Parent Age by Survey Year<sup>1</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Parent Marijuana Use	1979-1996		1979		1982		1988		1990		1991	
	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %
<b>Lifetime Use</b>												
Child/Parent, Age <sup>2,3</sup>												
12-14 years	37.5	44.6 ***	-	-	-	-	45.5	38.5	36.1	42.6	41.9	42.1
15-17 years	29.8	38.2	-	-	-	-	21.1	29.7	27.1	30.8	35.2	40.4
18-25 years <sup>4</sup>	24.2	24.8	-	-	-	-	-	-	-	-	18.1	28.8
12-17 years	36.5	39.9	15.7	19.6	20.9	29.2	34.6	32.9	32.3	35.7	38.7	41.4
<b>Last Year Use</b>												
Child/Parent, Age <sup>2,3</sup>												
12-14 years	7.0	6.8	-	-	-	-	11.7	4.7 *	6.1	7.5	6.2	8.2
15-17 years	3.9	4.4	-	-	-	-	4.0	2.5	12.7	3.4 *	3.6	6.6 *
18-25 years <sup>4</sup>	3.2	2.6	-	-	-	-	-	-	-	-	5.9	3.8
12-17 years	5.6	5.8	6.2	7.1	8.8	14.8	7.9	3.3 *	8.9	5.1	5.0	7.5 *
<b>Age Specific N's</b>												
Child/Parent, Age <sup>2,3</sup>												
12-14 years	4,223	3,078	-	-	-	-	159	214	108	264	774	558
15-17 years	3,105	2,779	-	-	-	-	129	267	77	293	641	405
18-25 years <sup>4</sup>	1,070	3,645	-	-	-	-	-	-	-	-	231	1,083
12-17 years	8,392	6,083	693	107	371	119	288	481	185	557	1,415	963
<b>Total N</b>	9,462	9,728	693	107	371	119	288	481	185	557	1,646	2,046

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>Age range for dyad parents is 24-73, 27-80 and 31-74; and for non-dyad parents 26-87, 26-71, and 26-71 for children aged 12-14, 15-17 and 18-25, respectively.

<sup>3</sup>Differentiation of children aged 12-14 and 15-17 not available for non-dyads in 1979 and 1982; data for children aged 18-25 available in NHSDA 1991-1996.

\* p<.05; \*\* p<.01; \*\*\*p<.001, Z-test for the percentage difference between dyad and non-dyad parents for each group within each sample.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.4 (cont'd). Prevalence of Parent Lifetime and Last Year Marijuana Use Among Parents by Membership in Parent-Child Dyads, by Child/Parent Age by Survey Year<sup>1</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Parent Marijuana Use	1992		1993		1994A		1994B		1995		1996	
	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %	Dyads %	Non-Dyads %
<b>Lifetime Use</b>												
Child/Parent, Age <sup>2,3</sup>												
12-14 years	40.1	53.2 ***	42.7	42.7	56.1	38.9 **	42.5	48.3	46.1	54.8 *	40.8	48.4
15-17 years	31.8	45.6 ***	42.7	46.1	37.1	38.6	34.7	38.8	37.5	43.6	38.1	49.7 **
18-25 years <sup>4</sup>	25.7	25.4	27.0	20.6	54.3	28.4 **	23.7	18.0	26.9	23.8	20.9	26.4
12-17 years	36.5	49.9 ***	42.7	44.5	47.0	38.7	39.3	43.2	41.6	48.4 **	39.6	49.2 ***
<b>Last Year Use</b>												
Child/Parent, Age <sup>2,3</sup>												
12-14 years	6.3	5.9	6.2	5.1	5.9	10.4	5.5	6.7	5.9	6.9	6.3	4.8
15-17 years	2.1	6.3 *	4.4	5.5	4.6	4.9	2.3	5.9*	5.5	4.3	6.6	4.3
18-25 years <sup>4</sup>	3.2	3.0	.7	1.2	.0	3.0	4.6	3.5	.7	1.5	1.8	1.8
12-17 years	4.5	6.1	5.4	5.3	5.3	7.6	4.2	6.3	5.7	5.4	6.2	4.5
<b>Age Specific N's</b>												
Child/Parent, Age <sup>2,3</sup>												
12-14 years	939	385	680	538	112	108	447	436	480	332	524	243
15-17 years	655	249	448	478	82	82	276	368	393	332	404	305
18-25 years <sup>4</sup>	275	728	85	598	35	120	157	385	76	407	211	324
12-17 years	1,594	634	1,128	1,016	194	190	723	804	873	664	928	548
<b>Total N</b>	1,869	1,362	1,213	1,614	229	310	880	1,189	949	1,071	1,139	872

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>Age range for dyad parents is 24-73, 27-80 and 31-74; and for non-dyad parents 26-87, 26-71, and 26-71 for children aged 12-14, 15-17 and 18-25, respectively.

<sup>3</sup>Differentiation of children aged 12-14 and 15-17 not available for non-dyads in 1979 and 1982; data for children aged 18-25 available in NHSDA 1991-1996. \* p<.05; \*\* p<.01; \*\*\* p<.001; Z-test for the percentage difference between dyad and non-dyad parents for each group within each sample.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.5.5. Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Child Age by Survey Year<sup>2</sup>  
(NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	Parent Marijuana Use											
	1979-1996				1979				1982			
	Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year	
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
<b>Total Dyads</b>												
Lifetime	15.6	22.9 ***	17.5	26.9 **	26.2	45.9 ***	28.6	39.3	20.9	44.1 *	24.3	40.2
Last Year	11.0	17.5 ***	12.7	21.9 **	20.8	37.2 **	22.4	38.2	17.2	35.2	20.9	22.0
N	6,379	3,084	8,891	572	592	101	657	36	288	83	335	36
<b>Children Aged 12-14 years</b>												
Lifetime	3.5	8.3 ***	4.5	15.6 **	8.4	32.8 **	10.9	37.6 *	1.3	25.5 *	5.2	27.5
Last Year	2.9	6.8 ***	3.7	12.8 **	7.0	28.2 **	8.9	36.0 *	1.3	15.5	4.9	7.5
N	3,020	1,774	4,443	351	288	65	328	25	157	61	192	26
<b>15-17 years</b>												
Lifetime	22.5	35.1 ***	25.8	38.0 *	42.8	70.2 *	46.0	43.6	39.0	89.1 *	43.8	82.3
Last Year	17.1	28.2 ***	19.9	33.2 *	33.6	53.9 *	35.6	43.6	32.0	83.0 *	37.1	70.6
N	2,529	1,069	3,410	188	304	36	329	11	131	22	143	10
<b>18-25 years<sup>3</sup></b>												
Lifetime	33.5	63.0 ***	39.3	80.4 *	-	-	-	-	-	-	-	-
Last Year	18.5	38.9 ***	22.4	54.5	-	-	-	-	-	-	-	-
N	830	241	1,038	33	-	-	-	-	-	-	-	-

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

\*p<.05; \*\*p<.01; \*\*\*p<.001, X<sup>2</sup> test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.5 (cont'd). Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Child Age by Survey Year<sup>2</sup>  
(NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	1990						1991						1992						1993					
	Lifetime			Last Year			Lifetime			Last Year			Lifetime			Last Year			Lifetime			Last Year		
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
<b>Total Dyads</b>																								
Lifetime	5.9	32.4 *	10.7	52.6	13.5	21.0 *	15.6	25.9	11.3	22.2 **	14.9	19.2	9.5	12.9	11.0	12.9	9.3							
Last Year	5.2	32.4 *	10.2	52.6	7.2	13.9 *	8.9	22.1	6.3	15.7 ***	9.3	12.1	7.7	10.1	8.7	10.1	8.7							
N	129	56	170	15	1,137	509	1,561	85	1,235	634	1,766	103	714	499	1,119	499	1,119							
<b>Children Aged</b>																								
<b>12-14 years</b>																								
Lifetime	6.7	17.9	11.5	0.0	2.0	3.4	2.6	2.8	2.1	4.8	3.1	3.7	2.6	1.4	2.2	1.4	1.2							
Last Year	6.7	17.9	11.5	0.0	1.8	2.6	2.2	1.9	1.3	4.0	2.3	3.2	2.5	1.3	2.1	1.3	0.7							
N	71	37	100	8	499	275	728	46	573	366	874	65	381	299	622	299	58							
<b>15-17 years</b>																								
Lifetime	4.8	59.0 *	9.6	87.8	11.7	38.9 ***	20.4	44.5	11.9	30.8 **	17.9	19.4	12.2	21.2	15.9	21.2	20.9							
Last Year	3.4	59.0 *	8.4	87.8	6.9	24.9 ***	12.5	32.6	6.7	25.4 **	12.7	9.5	10.7	17.5	13.3	17.5	20.9							
N	58	19	70	7	442	199	611	30	452	203	627	28	270	178	415	178	33							
<b>18-25 years<sup>3</sup></b>																								
Lifetime	-	-	-	-	39.2	45.4	38.9	63.9	29.0	70.7 ***	37.9	96.6	39.7	68.0	47.2	68.0	67.8							
Last Year	-	-	-	-	18.4	31.7	18.1	63.9	15.8	38.7 *	20.4	60.8	25.1	42.4	29.8	42.4	27.1							
N	-	-	-	-	196	35	222	9	210	65	265	10	63	22	82	22	3							

<sup>1</sup> In 1979, 1982 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

\*p<.05; \*\*p<.01; \*\*\*p<.001, X<sup>2</sup> test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

<sup>†</sup> In 1979, 1982 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>3</sup> NHSDA 1991-1996.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.6. Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Child Sex by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

	Parent Marijuana Use															
	1979-1996				1979				1982				1988			
	Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year	
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
Child Marijuana Use																
Total Dyads																
Lifetime	15.6	22.9 ***	17.5	26.9 ***	26.2	45.9 ***	28.6	39.3	20.9	44.1 ***	24.3	40.2 *	8.2	9.8	7.9	19.3
Last Year	11.0	17.5 ***	12.7	21.9 ***	20.8	37.2 ***	22.4	38.2*	17.2	35.2 ***	20.9	22.0	6.1	5.9	5.1	16.7*
N	6,379	3,084	8,891	572	592	101	657	36	288	83	335	36	208	81	267	22
Child Sex																
Male																
Lifetime	17.1	24.5 ***	18.5	34.2 **	27.2	39.2	28.4	37.1	23.0	52.0 *	24.6	57.2	8.2	7.6	7.0	20.4
Last Year	12.6	19.7 ***	14.2	26.8 **	22.3	30.8	22.8	35.0	18.8	34.7	20.5	31.3	5.7	3.6	4.1	15.5
N	3,128	1,589	4,516	291	304	49	335	18	152	45	172	25	118	47	152	13
Female																
Lifetime	14.1	21.4 ***	16.4	18.1	25.1	52.6 **	28.8	42.2	18.4	36.9	24.0	0.0 **	8.3	13.2	9.1	18.0
Last Year	9.4	15.6 ***	11.1	16.1	19.1	43.5 **	21.9	42.2	15.4	35.7	21.3	0.0 *	6.7	9.5	6.6	18.0
N	3,161	1,495	4,375	281	288	52	322	18	136	38	163	11	90	34	115	9

<sup>4</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

\*p<.05; \*\*p<.01; \*\*\*p<.001,  $\chi^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.6 (cont'd). Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Child Sex by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	Parent Marijuana Use															
	1990				1991				1992				1993			
	Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year	
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
Total Dyads																
Lifetime	5.9	32.4 ***	10.7	52.6 ***	13.5	21.0 **	15.6	25.9 *	11.3	22.2 **	14.9	19.2	9.5	12.9	11.0	9.3
Last Year	5.2	32.4 ***	10.2	52.6 ***	7.2	13.9 **	8.9	22.1 **	6.3	15.7 **	9.3	12.1	7.7	10.1	8.7	8.7
N	129	56	170	15	1,137	509	1,561	85	1,235	634	1,766	103	714	499	1,119	94
Child Sex																
Male																
Lifetime	7.5	13.6	9.1	11.2	14.8	24.8 *	17.4	36.3	14.5	22.9 *	17.0	22.7	8.5	17.1 *	12.0	11.2
Last Year	6.3	13.6	8.1	11.2	8.0	20.3 **	11.5	30.0	8.8	17.6 *	11.5	15.8	6.5	15.4 *	10.1	10.4
N	57	25	75	7	563	277	798	42	604	310	868	46	364	251	571	44
Female																
Lifetime	4.0	45.4 *	12.4	74.2	12.2	16.8	13.9	9.7	7.9	21.6 **	12.7	15.6	10.4	9.2	10.0	9.1
Last Year	4.0	45.4 *	12.4	74.2	6.6	6.7	6.5	9.7	3.6	13.9 **	7.2	8.4	8.8	5.5	7.4	7.6
N	72	31	95	8	574	232	763	43	631	324	898	57	350	248	548	50

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

\*p<.05; \*\*p<.01; \*\*\*p<.001, X<sup>2</sup> test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.5.7. Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Parent Sex by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

	Parent Marijuana Use																							
	1979-1996						1979						1982						1988					
	Lifetime			Last Year			Lifetime			Last Year			Lifetime			Last Year			Lifetime			Last Year		
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %		
Child Marijuana Use																								
	Total Dyads																							
	Lifetime	15.6	22.9 ***	17.5	26.9 ***	26.2	45.9 ***	28.6	39.3	20.9	44.1 ***	24.3	40.2 *	8.2	9.8	7.9	19.3							
	Last Year	11.0	17.5 ***	12.7	21.9 ***	20.8	37.2 ***	22.4	38.2 *	17.2	35.2 ***	20.9	22.0	6.1	5.9	5.1	16.7 *							
N	6,379	3,084	8,891	572	592	101	657	36	288	83	335	36	208	81	267	22								
Parent Sex																								
	Father																							
	Lifetime	15.3	21.4 *	17.2	23.9	25.5	45.8 *	29.2	34.8	26.3	45.8	28.2	46.8	7.5	9.7	5.3	25.5							
	Last Year	11.2	15.5 *	12.4	19.4	20.2	34.6	22.1	34.8	20.1	28.2	22.3	16.6	7.5	9.7	5.3	25.5							
N	1,776	1,146	2,693	229	215	52	249	18	108	33	180	50	48	22	61	9								
Mother																								
	Mother																							
	Lifetime	15.7	24.3 ***	17.7	30.4 **	26.7	46.1 **	28.2	45.5	16.8	42.9 *	21.6	33.2	8.5	9.9	8.8	11.6							
	Last Year	11.0	19.4 ***	12.9	24.9 **	21.2	40.6 **	22.6	42.8	15.1	39.9 *	19.9	27.6	5.6	4.0	5.1	5.7							
N	4,603	1,938	6,198	343	377	49	408	18	124	17	211	19	160	59	206	13								

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTABS, unweighted N's.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.7 (cont'd). Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Parent Sex by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Parent Marijuana Use																							
1990						1991						1992						1993					
Lifetime			Last Year			Lifetime			Last Year			Lifetime			Last Year			Lifetime			Last Year		
No %	Yes %		No %	Yes %		No %	Yes %		No %	Yes %		No %	Yes %		No %	Yes %		No %	Yes %		No %	Yes %	
Child Marijuana Use																							
Total Dyads																							
Lifetime	5.9	32.4 ***	10.7	52.6 ***	13.5	21.0 **	15.6	25.9 *	11.3	22.2 **	14.9	19.2	9.5	12.9	11.0	9.3							
Last Year	5.2	32.4 ***	10.2	52.6 ***	7.2	13.9 **	8.9	22.1 **	6.3	17 **	9.3	12.1	7.7	10.1	8.7	8.7							
N	129	56	170	15	1,137	509	1,561	85	1,235	634	1,766	103	714	499	1,119	94							
Parent Sex																							
Father																							
Lifetime	0	13.0	5.2	17.6	13.8	20.7 *	15.4	35.4	8.9	20.0 *	14.0	6.3	7.6	14.8	11.8	8.1							
Last Year	0	13.0	5.2	17.6	8.1	11.9	8.0	35.2	4.0	13.6 *	8.2	5.2	6.2	10.8	8.7	8.1							
N	34	21	50	5	349	192	509	32	335	240	532	43	178	181	329	30							
Mother																							
Lifetime	8.2	50.3 *	13.8	60.9	13.3	21.3	15.7	17.7	12.5	24.2 **	15.4	33.1	10.4	10.6	10.4	10.6							
Last Year	7.2	50.3 *	13.1	60.9	6.8	15.6 *	9.5	10.8	7.4	17.4 **	10.1	19.6	8.4	9.4	8.7	9.3							
N	95	35	120	10	788	317	1,052	53	900	394	1,234	60	536	318	790	64							

<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTABS, unweighted N's.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



<sup>1</sup> In 1979, 1982, 1988 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTABS, unweighted N's.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.8. Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Dyad Type by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	Parent Marijuana Use															
	1979-1996				1979				1982				1988			
	Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year	
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
Total Dyads																
Lifetime	15.6	22.9 ***	17.5	26.9 ***	26.2	45.9 ***	28.6	39.3	20.9	44.1 ***	24.3	40.2*	8.2	9.8	7.9	19.3
Last Year	11.0	17.5 ***	12.7	21.9 ***	20.8	37.2 ***	22.4	38.2*	17.2	35.2	20.9	22.0	6.1	5.9	5.1	16.7*
N	6,379	3,084	8,891	572	592	101	657	36	288	83	335	36	208	81	267	22
Dyad Type																
Father-Son																
Lifetime	17.2	25.3 *	19.1	33.3	27.5	40.1	29.6	34.7	25.3	48.1	25.1	52.5	2.0	8.3	1.5	21.4
Last Year	12.7	19.4 *	14.3	25.4	22.4	29.8	22.8	34.7	18.4	16.2	17.8	18.6	2.0	8.3	1.5	21.4
N	963	605	1,447	121	131	33	151	13	57	19	63	13	28	10	33	5
Father-Daughter																
Lifetime	12.8	17.2	14.9	11.0	22.3	55.6 *	28.4	35.1	27.5	43.0	31.3	0	16.0	11.1	10.3	29.6
Last Year	9.2	11.3	10.0	10.9	16.7	43.0	21.1	35.1	22.1	43.0	26.9	0	16.0	11.1	10.3	29.6
N	813	541	1,246	108	84	19	98	5	51	14	61	4	20	12	28	4
Mother-Son																
Lifetime	16.8	23.6 **	18.0	35.6 **	26.9	36.8	27.2	47.1	21.2	55.4 *	24.3	66.0	10.5	7.4	8.8	19.4
Last Year	12.5	20.0 **	14.0	28.6 *	22.2	33.4	22.8	36.4	19.1	50.9	22.4	55.0	7.1	1.9	5.0	9.5
N	2,255	984	3,069	170	173	16	184	5	95	26	109	12	90	37	119	8
Mother-Daughter																
Lifetime	14.7	25.0 ***	17.4	25.2	26.5	50.3 *	29.0	45.0	11.7	33.8	18.7	0*	6.0	14.8	8.7	0
Last Year	9.5	18.8 ***	11.8	21.2	20.3	43.9 *	22.4	45.0	10.5	31.9	17.2	0*	3.9	8.2	5.3	0
N	2,348	954	3,129	173	204	33	224	13	85	24	102	7	70	22	87	5

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

N	34	19	37	3	177	25	182	25
In 1979 1982 and 1990 children aged 12-17 were selected. In all other years, children aged 12-25 were selected.								

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ .  $\chi^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.8 (cont'd). Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Dyad Type by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	Parent Marijuana Use											
	1994A				1994B				1995			
	Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year	
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
<b>Total Dyads</b>												
Lifetime	6.5	27.5 **	13.7	77.1 **	16.5	18.4	16.7	30.1 *	15.0	19.1	16.6	17.8
Last Year	4.5	23.0 **	10.5	73.0 **	10.8	12.0	11.0	17.0	11.5	16.3 *	13.4	13.6
N	124	105	213	16	539	341	827	53	637	312	891	58
<b>Dyad Type</b>												
<b>Father-Son</b>												
Lifetime	3.9	39.6 *	22.5	100	10.5	16.0	11.6	33.2	18.7	24.2	20.2	28.0
Last Year	3.9	35.2 *	19.8	100	8.0	11.0	10.0	0 **	15.3	21.8	17.9	15.7
N	15	24	38	1	79	72	138	13	95	58	140	13
<b>Father-Daughter</b>												
Lifetime	0	18.2	1.4	76.3	10.8	13.3	11.9	11.0	18.5	4.1	11.7	0
Last Year	0	18.2	1.4	76.3	9.6	6.4	8.0	11.0	15.4	4.1	10.2	0
N	13	17	26	4	63	56	108	11	66	51	106	11
<b>Mother-Son</b>												
Lifetime	9.6	22.8	13.1	100 *	20.5	14.7	18.1	38.0	13.3	27.2	17.0	38.6
Last Year	7.9	18.7	10.8	77.8	13.4	11.8	12.1	38.0	10.4	21.8	13.1	38.6
N	64	40	99	5	184	105	275	14	234	102	318	18
<b>Mother-Daughter</b>												
Lifetime	8.4	24.6	13.7	54.8 *	19.0	27.7	21.2	45.3	12.1	19.1	15.8	1.0
Last Year	2.9	17.0	6.8	54.8 **	10.5	17.0	12.1	30.1	7.6	16.2 *	11.8	1.0
N	32	24	50	6	213	108	306	15	242	101	327	16

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

\*p<.05; \*\*p<.01; \*\*\*p<.001, X<sup>2</sup> test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.9. Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Ethnicity by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use		Parent Marijuana Use																							
		1979-1996						1979						1982						1988					
		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year					
		No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %				
Total Dyads <sup>3</sup>																									
Lifetime	15.6	22.9 ***	17.5	26.9 ***	26.2	45.9 ***	28.6	39.3	20.9	44.1 ***	24.3	40.2*	8.2	9.8	7.9	19.3									
Last Year	11.0	17.5	12.7	21.9 ***	20.8	37.2 ***	22.4	38.2 *	17.2	35.2 ***	20.9	22.0	6.1	5.9	5.1	16.7*									
N	6,379	3,084	8,891	572	592	101	657	36	288	83	335	36	208	81	267	22									
Ethnicity																									
White																									
Lifetime	16.3	23.6 ***	18.4	27.5	26.6	50.9 **	29.5	42.9	17.3	50.7 *	22.8	7.0	-	31.0	22.9	-									
Last Year	11.5	18.3 ***	13.5	22.2 *	21.1	40.2 **	22.9	41.2	14.3	39.8	19.8	11.5	-	15.4	11.4	-									
N	2,122	1,387	3,300	209	481	75	531	25	222	58	261	19	3	4	7	0									
African-American																									
Lifetime	14.3	19.8 *	15.8	22.4	26.3	33.8	27.2	35.6	31.6	28.0	28.3	41.5	8.1	2.7	6.0	3.7									
Last Year	10.8	14.3	11.5	17.9	20.2	30.5	21.1	35.6	29.1	23.2	25.1	34.2	5.4	1.0	3.5	3.7									
N	1,756	1,058	2,560	254	61	21	73	9	39	22	47	14	62	42	92	12									
Hispanic																									
Lifetime	14.9	25.3 ***	16.2	39.0 **	18.3	-	18.3	-	33.6	27.9	33.6	27.9	8.6	21.4	8.6	54.9									
Last Year	10.2	18.9 ***	11.1	36.2 **	15.4	-	15.4	-	23.4	27.9	23.4	27.9	6.9	15.9	6.5	46.2									
N	2,383	613	2,961	109	36	0	36	0	23	3	23	3	143	33	168	8									

1 In 1979 1982 and 1990 children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.<sup>3</sup> Includes "other" ethnic group.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.9 (cont'd). Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Ethnicity by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

[illegible]

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>3</sup> Includes "other" ethnic group.

\* $p<.05$ ; \*\* $p<.01$ ; \*\*\* $p<.001$ ,  $X^2$  test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.9 (cont'd). Lifetime and Last Year Marijuana Use of Children Aged 12-25<sup>1</sup> by Parent Use and Ethnicity by Survey Year<sup>2</sup> (NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Child Marijuana Use	Parent Marijuana Use																			
	1994A						1994B						1995				1996			
	Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year		Lifetime		Last Year	
	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %	No %	Yes %
Total Dyads <sup>3</sup>																				
Lifetime	6.5	27.5 **	13.7	77.1 **	16.5	18.4	16.7	30.1*	15.0	19.1	16.6	17.8	11.5	23.8 **	15.5	23.6 **	12.1	23.6**		
Last Year	4.5	23.0 **	10.5	73.0 **	10.8	12.0	11.0	17.0	11.5	16.3*	13.4	13.6	8.3	20.5 **	12.1	23.6**				
N	124	105	213	16	539	341	827	53	637	312	891	58	776	363	1,085	54				
Ethnicity																				
White																				
Lifetime	.9	27.7 **	12.0	100 *	17.4	16.6	16.6	29.4	17.1	20.8	19.1	15.4	8.5	24.2 *	15.0	20.6				
Last Year	.9	23.3 **	9.7	100 *	11.3	10.1	10.7	13.2	13.4	18.1	16.1	9.0	5.1	20.7 **	11.4	20.6				
N	51	52	98	5	186	180	346	20	116	131	225	22	130	127	240	17				
African-American																				
Lifetime	17.6	37.5	20.0	64.8	15.4	17.2	16.1	13.4	13.6	12.3	12.7	20.4	15.3	19.3	15.9	28.5				
Last Year	8.6	31.2	10.8	64.8	10.6	10.0	10.9	.5*	10.3	10.1	10.0	20.4	12.8	17.3	13.4	28.5				
N	29	27	47	9	175	88	245	18	207	121	301	27	276	146	394	28				
Hispanic																				
Lifetime	16.1	18.6	16.3	36.1	17.2	34.0 *	19.9	59.1	12.6	19.3	13.4	27.3	12.7	29.3 *	16.0	25.4				
Last Year	14.3	15.0	15.1	0	10.8	30.0 **	13.9	59.1	8.6	14.9	9.1	27.3	9.2	22.9 *	11.8	25.4				
N	44	24	66	2	170	73	228	15	307	59	357	9	368	88	448	8				

1 In 1970 1982 and 1990 children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC CROSSTAB, unweighted N's.

<sup>3</sup> Includes "other" ethnic group.

\*p<.05; \*\*p<.01; \*\*\*p<.001, X<sup>2</sup>test.

Source: SAMHSA. Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.10. Association (Unadjusted Odds Ratios) in Parent-Child Marijuana Use by Individual Survey Years<sup>1,2</sup>  
(NHSDA 1979, 1982, 1988, 1990, 1991, 1992, 1993, 1994A, 1994B, 1995, 1996)

Survey Years	N	Parent Lifetime Marijuana Use			Parent Last Year Marijuana Use		
		Child Lifetime	(95% CI)	Last Year	Child Lifetime	(95% CI)	Last Year
1979-1996	9,463	1.6 ***	(1.4-1.9)	1.7 ***	1.7 ***	(1.3-2.4)	1.9 ***
1979	693	2.4 ***	(1.5-3.9)	2.3 ***	1.6	(.9-3.0)	2.2 *
1982	371	3.0 **	(1.4-6.2)	2.6 *	2.1	(.8-5.8)	1.1
1988	289	1.2	(.5-3.1)	1.0	2.8	(.7-11.5)	3.7
1990	185	7.7 **	(1.9-31.3)	8.7 **	9.3 *	(1.7-51.0)	9.8 **
1991	1,646	1.7 *	(1.1-2.6)	2.1 **	1.9	(.8-4.6)	2.9 *
1992	1,869	2.3 ***	(1.5-3.5)	2.8 ***	1.4	(.6-2.9)	1.3
1993	1,213	1.4	(.7-2.7)	1.4	.8	(.4-1.9)	1.0
1994A	229	5.4 ***	(2.1-13.9)	6.3 ***	21.2 ***	(6.3-72.1)	23.1 ***
1994B	880	1.1	(.7-1.9)	1.1	2.2	(.8-5.6)	1.7
1995	949	1.3	(.8-2.2)	1.5	1.1	(.4-2.8)	1.0
1996	1,139	2.4 ***	(1.5-3.9)	2.8 ***	1.7	(.7-4.2)	2.2

<sup>1</sup>In 1979, 1982, 1988 and 1990 children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup>Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.5.11. Parent Age of Onset and Lifetime Frequency of Marijuana Use by Parent Former and Last Year Marijuana Use in Parent-Child Dyads, Children Aged 12-25<sup>1</sup> (NHSDA 1979-1996)

Marijuana Use	Parent Marijuana Use	
	Former User %	Last Year User %
Age of onset (in years)	20.2 (6.2)	20.5 (6.1)
Lifetime frequency <sup>2</sup>		
1-10 times	61.6	31.1 ***
11-99 times	20.7	27.8 **
100+ times	17.7	41.2 ***
Total N	2,512	572

<sup>1</sup>Weighted estimates, unweighted N's.

<sup>2</sup>The 1988-1996 lifetime marijuana use frequency variables were collapsed into four levels.

\*p<.05; \*\*p<.01; \*\*\*p<.001, Z-test for the percentage difference between former and last year users.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.5.12. Logistic Regressions Predicting Child's Lifetime and Last Year Marijuana Use from Parent Lifetime Frequency of Marijuana Use in Three Groups of Surveys<sup>1</sup> (NHSDA 1979-1996)

Parent Marijuana Use	N	Child Marijuana Use			
		Lifetime		Last Year	
		%	OR	%	OR
Lifetime Frequency					
1979-1996 (5 categories) <sup>2</sup>					
Never	6,379	15.6 <sup>a</sup>		11.0 <sup>a</sup>	
1-2 times	939	22.0 <sup>b</sup>	1.5 **	16.2 <sup>b</sup>	1.6 **
3-10 times	779	23.2 <sup>b</sup>	1.6 **	17.1 <sup>b</sup>	1.7 **
11-99 times	634	24.2 <sup>b</sup>	1.7 **	19.1 <sup>b</sup>	1.9 ***
100+ times	701	22.8 <sup>b</sup>	1.6 ***	18.4 <sup>b</sup>	1.8 ***
Missing	31	16.2	1.1	16.2	1.6
1991-1994A (8 categories)					
Never	3,210	11.3 <sup>a</sup>		6.7 <sup>a</sup>	
1-2 times	499	18.0 <sup>b</sup>	1.7 *	14.4 <sup>b</sup>	1.8 *
3-5 times	299	20.6 <sup>bc</sup>	2.0 *	16.7 <sup>bc</sup>	2.8 **
6-10 times	212	15.1 <sup>ab</sup>	1.4	10.1 <sup>ab</sup>	1.6
11-49 times	227	16.0 <sup>ab</sup>	1.5	12.1 <sup>abc</sup>	1.9
50-99 times	123	35.7 <sup>c</sup>	4.4 ***	26.5 <sup>c</sup>	5.0 ***
100-199 times	79	19.5 <sup>bc</sup>	1.9	16.8 <sup>bc</sup>	2.8 *
200+ times	293	22.8 <sup>bc</sup>	2.3 ***	16.7 <sup>bc</sup>	2.8 ***
Missing	15	18.5	1.8	18.5	3.1
1994B-1996 (6 categories)					
Never	1,952	14.0 <sup>a</sup>		10.0 <sup>a</sup>	
1-2 days	322	21.0 <sup>b</sup>	1.6 *	17.3 <sup>b</sup>	1.9 **
3-11 days	183	24.9 <sup>b</sup>	2.0 *	17.4 <sup>b</sup>	1.9 *
12-100 days	224	18.4 <sup>ab</sup>	1.4	15.3 <sup>ab</sup>	1.6
101-299 days	90	20.1 <sup>ab</sup>	1.6	16.1 <sup>ab</sup>	1.7
300+ days	189	19.7 <sup>ab</sup>	1.5	17.6 <sup>b</sup>	1.9 *
Missing	8	15.4	1.1	15.4	1.6

<sup>1</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's.

<sup>2</sup> The 1988-1996 categories were collapsed into five levels.

<sup>a-c</sup> Comparisons across categories of use for each pattern of use: percentages with different superscripts are significantly different from each other, Wald F-test ( $p \leq .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.1. Child Lifetime and Last Year Marijuana Use by Currency and Extensiveness of Parent Use of Cigarettes, Alcohol and Cocaine, Among Parent-Child Dyads, Aged 12-25<sup>1,2</sup>

Parent Substance Use	N	Child Marijuana Use					
		Lifetime			Last Year		
		%	OR	(95% CI)	%	OR	(95% CI)
<b>Cigarette Use</b>							
Currency of use							
Never	2,517	10.9 <sup>a</sup>	-		6.4 <sup>a</sup>	-	
Former	3,284	17.6 <sup>b</sup>	1.7 ***	(1.3-2.3)	13.4 <sup>b</sup>	2.3 ***	(1.7-3.1)
Last year	3,662	22.3 <sup>c</sup>	2.3 ***	(1.8-3.0)	16.6 <sup>c</sup>	2.9 ***	(2.2-3.9)
Past month frequency (vs. never)							
Never	2,517	10.9 <sup>a</sup>	-		6.4 <sup>a</sup>	-	
Former, not past month	3,599	17.7 <sup>b</sup>	1.8 ***	(1.4-2.3)	13.4 <sup>b</sup>	2.3 ***	(1.7-3.1)
<16 cigarettes/day	1,735	18.7 <sup>b</sup>	1.9 ***	(1.4-2.5)	14.0 <sup>b</sup>	2.4 ***	(1.7-3.4)
16-35 cigarettes/day	1,274	25.2 <sup>c</sup>	2.8 ***	(2.1-3.7)	19.9 <sup>c</sup>	3.7 ***	(2.6-5.1)
>35 cigarettes/day	230	28.6 <sup>c</sup>	3.3 ***	(2.0-5.2)	17.9 <sup>bc</sup>	3.2 ***	(1.8-5.9)
Missing <sup>3</sup>	108	14.4	1.4	(.6-3.4)	7.9	1.1	(.5-3.7)
<b>Alcohol Use</b>							
Currency of use							
Never	1,364	7.5 <sup>a</sup>	-		4.8 <sup>a</sup>	-	
Former	1,754	15.3 <sup>b</sup>	2.2 ***	(1.5-3.3)	9.7 <sup>b</sup>	2.1 ***	(1.3-3.5)
Last year	6,345	20.2 <sup>c</sup>	3.1 ***	(2.2-4.4)	15.4 <sup>c</sup>	3.6 ***	(2.4-5.5)
Past month frequency (vs. never)							
Never	1,364	7.4 <sup>a</sup>	-		4.8 <sup>a</sup>	-	
Former, not past month	3,356	15.8 <sup>b</sup>	2.3 ***	(1.6-3.3)	10.5 <sup>b</sup>	2.3 ***	(1.4-3.7)
<2 drinks/day	3,293	17.6 <sup>b</sup>	2.5 ***	(1.8-3.7)	12.4 <sup>b</sup>	2.8 ***	(1.8-4.5)
2+ drinks/day	370	22.1 <sup>b</sup>	3.5 ***	(2.0-6.1)	17.0 <sup>b</sup>	4.1 ***	(2.1-7.9)
Missing <sup>3</sup>	469	16.1	2.4 ***	(1.6-3.6)	13.5	3.1 ***	(1.9-5.0)
Not ascertained <sup>4</sup>	611	33.4	6.2 ***	(4.2-9.1)	27.6	7.6 ***	(4.7-12.1)
<b>Cocaine Use</b>							
Currency of use							
Never	854	17.4 <sup>a</sup>	-		12.7 <sup>a</sup>	-	
Former	722	23.3 <sup>b</sup>	1.5 *	(1.1-1.9)	16.8 <sup>b</sup>	1.4 *	(1.0-1.9)
Last year <sup>5</sup>	206	29.3 <sup>b</sup>	2.0 *	(1.1-3.4)	25.3 <sup>b</sup>	2.3 **	(2.3-4.1)
Lifetime frequency (vs. never)							
Never	8,535	17.4 <sup>a</sup>	-		12.7 <sup>a</sup>	-	
1-10 times	505	24.7 <sup>b</sup>	1.6 **	(1.1-2.1)	17.1 <sup>b</sup>	1.4 *	(1.0-2.0)
11-99 times	228	20.7 <sup>ab</sup>	1.2	(.7-2.1)	17.8 <sup>ab</sup>	1.5	(.9-2.6)
100+ times	183	30.8 <sup>b</sup>	2.1 ***	(1.3-3.5)	24.8 <sup>b</sup>	2.3 **	(1.4-3.7)
Missing <sup>3</sup>	12	.0	.0 ***	(.0- .1)	.0	.0 ***	(.0- .1)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were surveyed. In all other years, children aged 12-25 were surveyed.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios.

<sup>3</sup> Respondents were asked but did not report their quantity/frequency of substance use.

<sup>4</sup> Frequency of use not ascertained in 1979 and 1982.

<sup>5</sup> There were too few users to differentiate frequency of use in last year.

<sup>a-c</sup> Comparisons across categories of use for each pattern of use: percentages with different superscripts are significantly different from each other, Wald F-test ( $p \leq .05$ ).

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.2. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Lifetime Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.97	.75 *	(.60-.94)	1,544	.94	.77	(.51-1.16)	845	.73	.57 *	(.36-.89)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.84	.68 **	(.52-.91)	1,515	.96	.74	(.48-1.13)	1,013	.89	.58 *	(.34-.99)
Hispanic	2,996	.88	.97	(.73-1.27)	1,574	1.16	1.16	(.71-1.88)	1,065	.98	.81	(.47-1.38)
Other	144	.68	.96	(.50-1.83)	101	.59	.74	(.31-1.75)	20	.30 *	1.06	(.41-2.77)
<b>Parent birth cohorts (vs. before 1945)</b>												
Cohort 2 (1946-1948)	2,119				983				222			
Cohort 3 (1949-1953)	1,066	.67 **	.98	(.72-1.33)	579	.94	1.10	(.65-1.86)	283	.81	.98	(.54-1.80)
Cohort 4 (1954-1956)	1,951	.55 ***	.94	(.68-1.30)	1,097	.71	.97	(.60-1.58)	613	.81	1.10	(.58-2.10)
Cohort 5 (1957-1959)	1,235	.29 ***	.63 *	(.43-.92)	723	.29 ***	.49 *	(.26-.92)	401	.53 *	.93	(.48-1.80)
Cohort 6 (1960-1962)	1,379	.41 ***	1.09	(.72-1.63)	924	.53 **	1.37	(.66-2.82)	399	.54 *	.88	(.41-1.89)
Cohort 7 (1963-1964)	1,165	.27 ***	.95	(.60-1.51)	528	.30 ***	.82	(.32-2.09)	625	.39 ***	1.07	(.51-2.25)
Cohort 8 (after 1965)	366	.25 ***	1.09	(.58-2.03)	87	.03 ***	.10 *	(.01-.68)	279	.39 **	1.59	(.65-3.89)
<b>Parent education (vs. &lt; high school)</b>												
High school graduate	182	.23 ***	2.89 *	(1.19-7.00)	36	.05 **	.25	(.04-1.53)	146	.34 **	3.80 **	(1.50-9.61)
Some college	3,128				1,587				999			
College graduate	3,283	1.21	1.32 *	(1.03-1.70)	1,707	1.06	1.03	(.64-1.65)	1,031	1.19	1.34	(.89-2.02)
<b>Parent marital status (vs. married)</b>												
Widowed	1,793	1.16	1.34	(.99-1.82)	935	1.05	1.07	(.64-1.77)	582	1.03	1.08	(.63-1.84)
Divorced/separated	1,258	1.01	1.21	(.86-1.71)	728	.85	1.09	(.58-2.07)	356	.92	1.13	(.60-2.13)
Never married	6,600				3,444				1,987			
<b>Region of country (vs. West)</b>												
South	313	2.82 ***	2.20 ***	(1.43-3.39)	129	1.51	.74	(.31-1.75)	78	2.65 *	2.01	(.79-5.15)
North Central	1,759	1.35 **	1.20	(.92-1.56)	988	1.57 **	.91	(.55-1.50)	598	1.45 *	1.31	(.82-2.11)
Northeast	791	.86	1.01	(.67-1.54)	416	.79	.95	(.49-1.86)	305	.93	1.23	(.65-2.30)
<b>Household income (vs. &lt;\$8,999)</b>												
\$9,000-19,999	2,115				1,199				613			
\$20,000-39,999	3,945	.63 ***	.58 ***	(.43-.78)	2,009	.69	.65	(.33-1.25)	1,375	.64 *	.62	(.37-1.02)
\$40,000-74,999	1,834	.77	.73	(.53-1.01)	918	.74	.60	(.29-1.27)	558	.82	.66	(.39-1.12)
\$75,000+	1,569	.95	.78	(.58-1.06)	831	.89	.81	(.42-1.57)	422	.93	.60 *	(.37-.97)
<b>Population density (vs. MSA with 1 million+)</b>												
MSA with <1 million					657				364			
Not in MSA					1,157	1.06	1.00	(.57-1.77)	751	1.20	1.19	(.60-2.36)
					1,579	1.48	1.32	(.77-2.28)	947	1.06	.90	(.43-1.88)
					1,206	1.28	.85	(.46-1.58)	698	1.54	1.31	(.59-2.91)
					358	1.64	.91	(.41-2.06)	208	1.22	1.23	(.52-2.89)
					586				1,276			
					831	.87	.73	(.48-1.13)	977	.97	1.03	(.73-1.46)
					3,540	.84	.99	(.58-1.71)	715	.81	.86	(.57-1.30)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.<sup>4</sup> Respondents were asked but did not report.<sup>5</sup> Not ascertained for children aged 18-25.<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p&lt;.05; \*\*p&lt;.01; \*\*\*p&lt;.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.2 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Lifetime Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Lifetime Substance Use</b>												
Marijuana lifetime use (vs. never)	6,379											
Lifetime use	3,084	1.61 ***	2.77 ***	(2.13-3.61)	3,210	1.95 ***	2.28 ***	(1.43-3.64)	1,952	1.61 **	1.72 **	(1.15-2.56)
Cigarette smoking lifetime (vs. never)	2,517				1,747				1,016			
Lifetime use	6,946	2.01 ***	1.47 **	(1.12-1.94)	1,435	1.98 ***	1.30	(.83-2.05)	804	1.96 ***	2.01 **	(1.28-3.17)
Lifetime use (vs. never)	1,364				3,522				2,164			
Lifetime use	8,099	2.91 ***	2.16 ***	(1.45-3.23)	694	2.72 ***	1.89 *	(1.06-3.36)	520	2.40 ***	1.74	(.93-3.26)
Cocaine lifetime use (vs. never)	8,535				4,263				2,448			
Lifetime use	928	1.53 ***	1.71 **	(1.21-2.42)	4,412	1.96 ***	2.27 *	(1.16-4.47)	2,658	1.65 *	2.07 **	(1.26-3.42)
Risk of occasional marijuana use (vs. great risk)					545				310			
Moderate risk					2,405	1.01	1.04	(.70-1.54)				
Slight/no risk					1,327	1.48 *	1.14	(.71-1.83)				
Missing <sup>4</sup>					1,160	1.13	.93 *	(.01-2.72)				
Delinquency in past year					99	1.14		(.63-1.37)				
Major depressive episode in past year (vs. not)												
Major depressive episode												
General anxiety disorder in past year (vs. not)												
General anxiety disorder												
<b>Child Sociodemographics</b>												
Child sex (vs. female)												
Child age at survey (vs. age 15)												
12	4,807	1.21 *	1.27 *	(1.03-1.57)	2,512	1.40 *	.93	(.62-1.37)	1,498	1.11	1.63 ***	(1.26-2.12)
13	1,262				642				377			
14	1,703	0.05 ***	.04 ***	(.02-.09)	891	.08 ***	.08 ***	(.02-.28)	511	.07 ***	.05 ***	(.02-.12)
15	1,621	0.22 ***	.20 ***	(.12-.32)	872	.21 ***	.20 **	(.07-.57)	489	.12 ***	.10 ***	(.04-.24)
16	1,470	0.44 ***	.40 ***	(.28-.59)	742	.35 ***	.39 **	(.20-.76)	451	.38 **	.30 **	(.14-.64)
17	1,273	1.55 **	1.65 **	(1.21-2.24)	646	1.56	1.22	(.67-2.21)	376	1.41	1.25	(.72-2.18)
18	1,063	1.96 ***	2.23 ***	(1.59-3.13)	538	2.18 **	2.14 *	(1.02-4.48)	320	1.89 *	1.49	(.72-3.06)
19	248	1.18	1.41	(.82-2.42)	138	1.73	.90	(.35-2.35)	109	1.75	2.62 *	(1.19-5.79)
20	189	3.48 ***	5.16 ***	(2.86-9.29)	102	6.69 ***	5.82 **	(1.86-18.20)	87	3.43 ***	4.60 ***	(2.08-10.16)
21	155	3.47 ***	6.32 ***	(3.38-11.81)	92	6.50 ***	6.87 **	(2.18-21.66)	63	3.42 **	5.06 **	(1.66-15.43)
22	120	4.12 ***	7.87 ***	(3.91-15.84)	71	6.45 ***	6.52 ***	(2.22-19.18)	49	5.68 ***	5.81 **	(1.87-18.05)
23	113	1.76	1.55	(.60-3.99)	71	2.37	1.16	(.30-4.39)	42	3.79 **	3.45	(.91-13.03)
24	99	4.55 ***	3.01 **	(1.33-6.80)	63	9.34 ***	5.61 *	(1.34-23.51)	36	3.43 *	3.03	(.66-13.85)
25	73	5.72 ***	4.22 ***	(1.97-9.00)	43	9.42 ***	8.64 **	(2.02-36.94)	30	6.99 ***	7.82 **	(2.01-30.41)
	74	4.94 ***	3.72	(1.77-7.85)	46	8.81 ***	14.05 **	(2.34-84.26)	28	5.27 **	5.80 *	(1.43-23.46)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.2 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Lifetime Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
Child birth cohort (vs. 1962-1964)	340											
Cohort 2 (1965-1969)	833	.38 ***	.81	(.54-1.23)	189				15			
Cohort 3 (1970-1974)	1,452	.51 ***	.26 ***	(.17-.39)	895	.46 *	.68	(.27-1.71)	206	1.14	1.36	(.39-4.72)
Cohort 4 (1975-1979)	4,518	.18 ***	.19 ***	(.13-.27)	3,228	.11 ***	.42	(.13-1.42)	1,072	.36	.71	(.17-2.91)
Cohort 5 (1980-1984)	2,320	.06 ***	.20 ***	(.12-.33)	645	.02 ***	.72	(.14-3.65)	1,675	.07 ***	.50	(.11-2.26)
High school dropout (vs. non-dropout)	8,909				4,665				2,741			
Dropout	554	3.20 ***	2.21 ***	(1.48-3.30)	292	5.07 ***	2.64 **	(1.41-4.93)	227	2.24 ***	1.50	(.78-2.89)
Child Personal Characteristics												
Risk of occasional marijuana use (great risk)					2,568							
Moderate risk					1,428	3.31 ***	2.91 ***	(1.93-4.40)				
Slight/no risk					905	13.44 ***	8.77 ***	(6.05-12.72)				
Missing <sup>4</sup>					56	4.46 *	11.61 **	(1.86-72.48)				
Child delinquency in past year						1.55 ***	1.53 ***	(1.38-1.70)	1,975			
Behavioral problem in past six months (vs. no problem)												
Problem									476	4.69 ***	3.89 ***	(2.64-5.72)
Missing <sup>4</sup>									73	1.54	2.65	(.84-8.36)
Missing <sup>5,6</sup>									444	7.58 ***	1.00	(1.00-1.00)
Emotional problem in past six months (vs. no problem)									2,098			
Problem									353	2.82 ***	1.65 *	(1.00-2.73)
Missing <sup>4,6</sup>									73	1.18	1.00	(1.00-1.00)
Missing <sup>5,6</sup>									444	5.83 ***	1.00	(1.00-1.00)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies; National Household Survey on Drug Abuse.

Table A.6.3. Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Lifetime Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.96	.75 *	(.59-.96)	1,544	.90	.77	(.46-1.26)	845	.84	.70	(.43-1.13)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.85	.84	(.63-1.12)	1,515	.94	.85	(.53-1.36)	1,013	.94	.79	(.42-1.46)
Hispanic	2,996	.84	1.16	(.86-1.56)	1,574	1.12	1.43	(.87-2.36)	1,065	.95	1.03	(.55-1.96)
Other	144	.71	1.05	(.51-2.16)	101	.59	.82	(.32-2.05)	20	.43	1.59	(.54-4.71)
<b>Parent birth cohorts (vs. before 1945)</b>												
Cohort 2 (1946-1948)	1,066	.66 *	.91	(.64-1.29)	579	1.29	1.30	(.69-2.45)	283	.91	.96	(.50-1.84)
Cohort 3 (1949-1953)	1,951	.59 ***	.90	(.63-1.28)	1,097	.98	.94	(.56-1.58)	613	1.05	1.20	(.61-2.36)
Cohort 4 (1954-1956)	1,235	.32 ***	.61 *	(.39-.97)	723	.38 ***	.41 *	(.17-.97)	401	.73	1.04	(.51-2.14)
Cohort 5 (1957-1959)	1,379	.46 ***	1.04	(.66-1.65)	924	.77	1.27	(.50-3.21)	399	1.03	1.04	(.46-2.28)
Cohort 6 (1960-1962)	1,165	.36 ***	1.03	(.62-1.70)	528	.47 *	.81	(.27-2.44)	625	.62	1.46	(.68-3.11)
Cohort 7 (1963-1964)	366	.23 ***	.79	(.37-1.70)	87	.06 ***	.10 *	(.01-.94)	279	.40 *	1.29	(.50-3.33)
Cohort 8 (after 1965)	182	.30 **	2.63 *	(1.04-6.64)	36	.10 *	.31	(.04-2.59)	146	.50	4.10 **	(1.52-11.04)
<b>Parent education (vs. &lt; high school)</b>												
High school graduate	3,128	1.40 **	1.54 **	(1.17-2.02)	1,587	1.43	1.24	(.73-2.08)	999	1.31	1.61 *	(1.00-2.59)
Some college	3,283	1.39 *	1.61 **	(1.19-2.18)	1,707	1.38	1.21	(.68-2.17)	1,031	1.33	1.57	(.83-2.98)
College graduate	1,793	1.31	1.59 *	(1.11-4.28)	935	1.18	1.45	(.73-2.88)	582	1.36	1.96	(.92-4.21)
<b>Parent marital status (vs. married)</b>												
Widowed	6,600	2.45 ***	1.90 **	(1.24-2.91)	3,444	.64	.36	(.10-1.26)	1,987	1.54	1.29	(.48-3.50)
Divorced/separated	313	1.43 **	1.32 *	(1.01-1.73)	129	2.01 ***	1.40	(.79-2.46)	78	1.25	1.07	(.64-1.78)
Never married	1,759	.81	.93	(.59-1.45)	968	.80	1.11	(.54-2.29)	598	.83	.90	(.40-2.00)
<b>Region of country (vs. West)</b>												
South	791				416				305			
North Central	2,115	.61 ***	.61 **	(.44-.86)	1,199	.59 *	.56	(.33-1.33)	613	.73	.75	(.43-1.34)
Northeast	3,945	.78	.78	(.55-1.11)	2,009	.74	.65	(.31-1.38)	1,375	.77	.66	(.36-1.21)
Household income (vs. <\$8,999)	1,834	.93	.81	(.59-1.12)	831	.68	.66	(.27-1.15)	558	1.01	.72	(.42-1.25)
\$9,000-19,999	1,569				657				422			
\$20,000-39,999					1,157	1.10	1.18	(.59-2.33)	364	1.00	.87	(.42-1.81)
\$40,000-74,999					1,579	1.67	1.52	(.79-2.94)	751	.85	.62	(.29-1.31)
\$75,000+					1,206	1.39	1.06	(.47-2.38)	947	1.28	.82	(.37-1.82)
Population density (vs. MSA with 1 million+)					358	1.53	.76	(.29-2.02)	698	1.18	.80	(.33-1.94)
MSA with <1 million					586				1,276			
Not in MSA					831	1.06	.96	(.57-1.60)	977	.88	.88	(.62-1.26)
					3,540	.81	.78	(.40-1.52)	715	.77	.79	(.50-1.25)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.<sup>4</sup> Respondents were asked but did not report.<sup>5</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.<sup>6</sup> Not ascertained for children aged 18-25.<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p&lt;.05; \*\*p&lt;.01; \*\*\*p&lt;.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.3 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Lifetime Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Lifetime Substance Use</b>												
Marijuana lifetime use (vs. never)	6,379	1.71 ***	2.58 ***	(1.97-3.37)	3,210	2.31 ***	2.04 **	(1.24-3.37)	1,952	1.82 ***	1.66 *	(1.10-2.51)
Lifetime use	3,084				1,747				1,016			
Cigarette smoking lifetime (vs. never)	2,517	2.59 ***	1.86 ***	(1.39-2.50)	1,435	3.69 ***	2.79 ***	(1.55-5.02)	804	2.40 ***	2.42 ***	(1.57-3.72)
Lifetime use	6,946				3,522				2,164			
Alcohol lifetime use (vs. never)	1,364	3.24 ***	1.96 **	(1.19-3.23)	694	2.60 *	1.04	(.49-2.19)	520	2.72 ***	1.65	(.85-3.22)
Lifetime use	8,099				4,263				2,448			
Cocaine lifetime use (vs. never)	8,535	1.54 **	1.48 *	(1.02-2.12)	4,412	2.39 ***	2.46 **	(1.24-4.88)	2,658	1.53 *	1.52	(.88-2.62)
Lifetime use	928				545				310			
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (vs. great risk)					2,405							
Moderate risk	1,327				1,14	1.07		(.69-1.67)				
Slight/no risk	1,160				1,32	.70		(.42-1.15)				
Missing <sup>4</sup>	99				.35	.02 **		(.00-.28)				
Delinquency					1,25	.95		(.64-1.42)				
Major depressive episode in last year (vs. not)									2,695			
Major depressive episode	1,262	1.36 **	1.43 **	(1.15-1.77)	2,512	1.73 **	1.06	(.69-1.63)	1,498	1.34 *	1.96 ***	(1.44-2.67)
General anxiety disorder in last year (vs. not)	1,703				642				273	1.49	1.23	(.67-2.28)
General anxiety disorder	1,621	.07 ***	.06 ***	(.03-.13)	891	.10 ***	.12 **	(.03-.47)	377	.09 ***	.08 ***	(.03-.18)
Child Sociodemographics	1,470	.26 ***	.24 ***	(.14-.41)	872	.23 **	.23 *	(.07-.77)	489	.14 ***	.12 ***	(.05-.31)
Child sex (vs. female)	1,273	.49 ***	.45 ***	(.29-.68)	742	.40 **	.45	(.20-1.02)	451	.42 *	.36 *	(.16-.80)
Child age at survey (vs. age 15)	1,063	1.77 ***	1.77 ***	(1.28-2.43)	646	1.65	1.33	(.66-2.70)	376	1.50	1.46	(.84-2.53)
	1,262	1.90 ***	2.21 ***	(1.53-3.18)	538	1.74	1.74	(.84-3.59)	320	2.03 *	1.83	(.81-4.13)
	248	1.12	1.41	(.76-2.62)	138	1.91	1.27	(.42-3.91)	109	1.21	1.80	(.69-4.69)
	189	2.21 **	3.32 ***	(1.82-6.04)	102	3.10 **	3.34 *	(1.13-9.91)	87	3.11 **	4.58 ***	(1.88-11.14)
	155	2.96 ***	5.74 ***	(3.13-10.53)	92	5.22 ***	7.73 ***	(2.44-24.47)	63	3.03 *	5.75 **	(1.86-17.78)
	120	2.27 *	4.60 ***	(1.94-10.88)	71	4.70 **	7.54 **	(2.09-27.25)	49	1.40	2.28	(.56-9.37)
	113	1.49	1.38	(.50-3.83)	71	2.16	1.78	(.44-7.23)	42	2.47	4.01	(.98-16.38)
	99	.98	.48	(.18-1.24)	63	1.66	.72	(.10-5.02)	36	1.08	1.63	(.37-7.13)
	73	2.76 *	1.69	(.55-5.18)	43	3.94 *	6.88 *	(1.17-40.57)	30	3.81	7.60 **	(1.38-41.99)
	74	1.28	.83	(.32-2.21)	46	1.33	2.31	(.24-22.09)	28	2.59	5.36 *	(1.12-25.68)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.3 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Lifetime Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Child birth cohort (vs. 1962-1964)<sup>5</sup></b>	340	.36 ***	.88	(.56-1.38)	189	1.02	1.03	(.32-3.30)	221			
Cohort 2 (1965-1969)	833	.41 ***	.24 ***	(.15-.38)	895	.34 **	1.15	(.29-4.60)	1,072	.68	.92	(.32-2.65)
Cohort 3 (1970-1974)	1,452	.21 ***	.22 ***	(.14-.35)	3,228	.09 ***	2.15	(.31-14.80)	1,675	.15 ***	.69	(.21-2.24)
Cohort 4 (1975-1979)	4,518	.08 ***	.26 ***	(.14-.47)	645				2,741			
Cohort 5 (1980-1984)	2,320				4,665							
High school dropout (vs. non-dropout)	8,909	2.86 **	2.25 ***	(1.40-3.62)	292	5.09 ***	3.29 **	(1.45-7.50)	227	2.01 **	1.61	(.80-3.23)
<b>Child Personal Characteristics</b>	554				2,568				1,975			
Risk of occasional marijuana use (vs. great risk)					1,428	4.67 ***	4.33 ***	(2.33-8.04)	476	4.48 ***	4.08 ***	(2.70-6.16)
Moderate risk												
Slight/no risk												
Missing <sup>4</sup>												
Child delinquency in past year					905	20.07 ***	11.94 ***	(7.33-19.47)	73	1.40	2.44	(.76-7.85)
Behavioral problem in past six months (vs. no problem)					56	9.09 ***	21.27 **	(3.15-143.78)	444	4.36 ***	1.00	(1.00-1.00)
Problem						1.58 ***	1.57 ***	(1.41-1.75)	2,098			
Missing <sup>4,7</sup>									353	2.41 ***	1.36	(.83-2.24)
Emotional problem in past six month (vs. no problem)									73	1.05	1.00	(1.00-1.00)
Problem												
Missing <sup>4,7</sup>									444	3.26 ***	1.00	(1.00-1.00)
Missing <sup>6,7</sup>												

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.4. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Former/Current Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.97	.74 **	( .59- .92)	1,544	.94	.75	( .50-1.13)	845	.73	.56 *	( .36- .88)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.84	.68 **	( .51- .90)	1,515	.96	.74	( .48-1.14)	1,013	.89	.58 *	( .34- .99)
Hispanic	2,996	.88	.94	( .71-1.29)	1,574	1.16	1.19	( .74-1.93)	1,065	.98	.78	( .45-1.35)
Other	144	.68	.94	( .48-1.84)	101	.59	.72	( .31-1.69)	20	.30 *	1.05	( .40-2.76)
Parent birth cohorts (vs. before 1945)												
Cohort 2 (1946-1948)	2,119				983				222			
Cohort 3 (1949-1953)	1,066	.67 **	.95	( .70-1.28)	579	.94	1.13	( .67-1.94)	283	.81	.98	( .54-1.79)
Cohort 4 (1954-1956)	1,951	.55 ***	.93	( .67-1.29)	1,097	.71	.99	( .61-1.61)	613	.81	1.11	( .59-2.11)
Cohort 5 (1957-1959)	1,235	.29 ***	.62 *	( .42- .90)	723	.29 ***	.49 *	( .26- .91)	401	.53 *	.92	( .48-1.77)
Cohort 6 (1960-1962)	1,379	.41 ***	1.04	( .69-1.57)	924	.53 **	1.37	( .68-2.78)	399	.54 *	.86	( .40-1.83)
Cohort 7 (1963-1964)	1,165	.27 ***	.88	( .55-1.41)	528	.30 ***	.80	( .31-2.05)	625	.39 ***	1.07	( .51-2.25)
Cohort 8 (after 1965)	366	.25 ***	1.04	( .55-1.97)	87	.03 ***	.09 *	( .01- .81)	279	.39 **	1.54	( .61-3.86)
Parent education (vs. < high school)	182	.23 ***	2.71 *	( 1.13-6.49)	36	.05 **	.28	( .04-1.73)	146	.34 **	3.53 **	( 1.40-8.89)
High school graduate	3,128				1,587				999			
Some college	3,283	1.21	1.27	( .99-1.64)	1,707	1.06	1.07	( .66-1.71)	1,031	1.19	1.34	( .89-2.00)
College graduate	1,793	1.16	1.30	( .96-1.77)	935	1.05	1.11	( .67-1.84)	582	1.03	1.08	( .63-1.84)
Parent marital status (vs. married)	1,258	1.01	1.19	( .84-1.69)	728	.85	1.22	( .64-2.30)	356	.92	1.13	( .60-2.15)
Widowed	6,600				3,444				1,987			
Divorced/separated	313	2.82 ***	2.20 ***	( 1.43-3.37)	129	1.51	.69	( .29-1.67)	78	2.65 *	2.06	( .81-5.22)
Never married	1,759	1.35 **	1.17	( .90-1.53)	968	1.57 **	.91	( .55-1.51)	598	1.45 *	1.32	( .81-2.13)
Region of country (vs. West)	791	.86	.98	( .64-1.50)	416	.79	.91	( .48-1.75)	305	.93	1.22	( .63-2.34)
South	2,115				1,199				613			
North Central	3,945	.63 ***	.59 ***	( .43- .79)	2,009	.69	.63	( .33-1.21)	1,375	.64 *	.60 *	( .36-1.00)
Northeast	1,834	.77	.73 *	( .53-1.00)	918	.74	.60	( .29-1.25)	558	.82	.64	( .38-1.09)
Household income (vs. <\$8,999)	1,569	.95	.76	( .56-1.04)	831	.89	.81	( .42-1.55)	422	.93	.58 *	( .36- .94)
\$9,000-19,999					657				364			
\$20,000-39,999					1,157	1.06	1.00	( .57-1.77)	751	1.20	1.23	( .61-2.48)
\$40,000-74,999					1,579	1.48	1.32	( .76-2.28)	947	1.06	.93	( .44-1.98)
\$75,000+					1,206	1.28	.86	( .46-1.60)	698	1.54	1.36	( .60-3.07)
Population density (vs. MSA with 1 million+)					358	1.64	.93	( .41-2.09)	208	1.22	1.27	( .53-3.04)
MSA with <1 million					586				1,276			
Not in MSA					831	.87	.71	( .46-1.10)	977	.97	1.03	( .73-1.46)
					3,540	.84	.95	( .55-1.64)	715	.81	.86	( .57-1.30)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.4 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Former/Current Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>1</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Former/Current Substance Use</b>												
Marijuana (vs. never)	6,379				3,210				1,952			
Former	2,512	1.55 ***	2.58 ***	(1.96-3.39)	1,449	1.93 ***	2.26 ***	(1.40-3.66)	851	1.57 **	1.70 **	(1.14-2.53)
Last year	572	2.00 ***	3.09 ***	(1.93-4.93)	298	2.09 **	1.77	(.84-3.75)	165	1.86 *	1.89	(.82-4.33)
<b>Cigarette (vs. never)</b>	2,517				1,435				804			
Former	3,284	1.74 ***	1.34	(.99-1.80)	1,723	1.71 **	1.18	(.73-1.89)	987	1.96 **	2.00 **	(1.20-3.35)
Last year	3,662	2.33 ***	1.60 **	(1.20-2.14)	1,799	2.34 ***	1.57	(.94-2.64)	1,177	1.96 ***	2.01 **	(1.27-3.18)
<b>Alcohol (vs. never)</b>	1,364				694				520			
Former	1,754	2.24 ***	1.77 *	(1.12-2.80)	901	2.64 **	2.16 *	(1.16-4.01)	535	2.07 *	1.70	(.83-3.50)
Last year	6,345	3.13 ***	2.40 ***	(1.61-3.58)	3,362	2.74 ***	1.73	(.94-2.64)	1,913	2.51 ***	1.77	(.95-3.31)
<b>Cocaine (vs. never)</b>	8,535				4,412				2,658			
Former	722	1.45 ***	1.64 *	(1.12-2.40)	427	1.81 **	2.10	(.98-4.48)	254	1.58 *	1.84 *	(1.11-3.03)
Last year	206	1.97 ***	1.80	(.80-4.04)	118	2.73 *	3.86	(.98-15.20)	56	2.19	4.61 **	(1.47-14.41)
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (great)					2,405							
Moderate risk					1,327	1.01	1.04	(.71-1.53)				
Slight/no risk					1,160	1.48 *	1.18	(.74-1.87)				
Missing <sup>4</sup>					99	1.13	.14	(.01-2.65)				
Delinquency in past year					4,957	1.14	1.53 ***	(1.35-4.67)				
Major depressive episode in past year (vs. Major depressive episode									2,695			
General anxiety disorder in past year (vs. General anxiety disorder									273	1.32	.91	(.52-1.60)
Child Sociodemographics									2,888	1.91	1.28	(.58-2.82)
Child sex (vs. female)	4,807	1.21 *	1.26 *	(1.02-1.55)	2,512	1.40 *	.91	(.62-1.35)	1,498	1.11	1.63 ***	(1.27-2.11)
Child age at survey (vs. age 15)	1,262				642				377			
12	1,703	0.05 ***	.04 ***	(.02-.09)	891	.08 ***	.08 ***	(.02-.29)	511	.07 ***	.05 ***	(.02-.12)
13	1,621	0.22 ***	.19 ***	(.12-.31)	872	.21 ***	.20 **	(.07-.52)	489	.12 ***	.10 ***	(.04-.24)
14	1,470	0.44 ***	.40 ***	(.27-.59)	742	.35 ***	.40 **	(.20-.79)	451	.38 **	.29 **	(.13-.63)
16	1,273	1.55 **	1.65 **	(1.21-2.26)	646	1.56	1.20	(.66-2.19)	376	1.41	1.23	(.70-2.16)
17	1,063	1.96 ***	2.22 ***	(1.58-3.12)	538	2.18 **	2.12 *	(1.01-4.41)	320	1.89 *	1.49	(.72-3.07)
18	248	1.18	1.41	(.82-2.43)	138	1.73	.88	(.33-2.34)	109	1.75	2.66 *	(1.21-5.83)
19	189	3.48 ***	5.36 ***	(2.95-9.75)	102	6.69 ***	5.76 **	(1.86-17.87)	87	3.43 ***	4.64 ***	(2.10-10.25)
20	155	3.47 ***	6.02 ***	(3.21-11.27)	92	6.50 ***	7.10 **	(2.22-22.77)	63	3.42 **	5.08 **	(1.65-15.61)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.<sup>4</sup> Respondents were asked but did not report.<sup>5</sup> Not ascertained for children aged 18-25.<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.  
\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.4 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Former/Current Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
21	120	4.12 ***	8.00 ***	(3.96-16.16)	71	6.45 ***	6.20 ***	(2.07-18.59)	49	5.68 ***	5.87 **	(1.89-18.19)
22	113	1.76	1.61	(.62-4.18)	71	2.37	1.10	(.29-4.15)	42	3.79 **	3.46	(.93-12.81)
23	99	4.55 ***	3.20 **	(1.42-7.23)	63	9.34 ***	5.44 *	(1.30-22.71)	36	3.43 *	2.98	(.66-13.45)
24	73	5.72 ***	4.48 ***	(2.05-9.79)	43	9.42 ***	8.14 **	(1.93-34.33)	30	6.99 ***	7.96 **	(2.01-31.48)
25	74	4.94 ***	3.91 ***	(1.85-8.30)	46	8.81 ***	12.92 **	(2.22-75.19)	28	5.27 **	5.79 *	(1.42-23.55)
Child birth cohort (vs. 1962-1964)	340							(vs. 1965-1969)				(vs. 1965-1969)
Cohort 2 (1965-1969)	833	.38 ***	.81	(.54-1.23)	189		.63	(.25-1.58)	15		1.37	(.40-4.68)
Cohort 3 (1970-1974)	1,452	.51 ***	.27 ***	(.18-.41)	895	.46 *	.40	(.12-1.28)	206	1.14	.72	(.18-2.93)
Cohort 4 (1975-1979)	4,518	.18 ***	.20 ***	(.14-.29)	3,228	.11 ***	.66	(.13-3.40)	1,072	.36	.51	(.11-2.36)
Cohort 5 (1980-1984)	2,320	.06 ***	.22 ***	(.13-.36)	645	.02 ***			1,675	.07 ***		
High school dropout (vs. non-dropout)	8,909				4,665				2,741			
Dropout	554	3.20 ***	2.25 ***	(1.49-3.40)	292	5.07 ***	2.51 **	(1.35-4.67)	227	2.24 ***	1.51	(.77-2.96)
Child Personal Characteristics					2,568				1,975			
Risk of occasional marijuana use (great risk)					1,428	3.31 ***	2.94 ***	(1.95-4.42)	476	4.69 ***	3.93 ***	(2.66-5.81)
Moderate risk					905	13.44 ***	8.84 ***	(6.04-12.93)	73	1.54	2.62	(.83-8.24)
Slight/no risk					56	4.46 *	11.36 **	(1.81-71.24)	444	7.58 ***	1.00	(1.00-1.00)
Missing <sup>4</sup>						1.55 ***	1.53 ***	(1.37-1.69)				
Child delinquency in past year												
Behavioral problem in past six months												
Problem												
Missing <sup>4</sup>												
Missing <sup>5,6</sup>												
Emotional problem in past six months (vs. no												
Problem												
Missing <sup>4,6</sup>												
Missing <sup>5,6</sup>												
									2,098			
									353	2.82 ***	1.65 *	(1.00-2.75)
									73	1.18	1.00	(1.00-1.00)
									444	5.83 ***	1.00	(1.00-1.00)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Not ascertained for children aged 18-25.

<sup>6</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.  
\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.5. Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Former/Current Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.96	.73 *	(.57-.94)	1,544	.90	.76	(.46-1.27)	845	.84	.70	(.43-1.13)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.85	.84	(.63-1.12)	1,515	.94	.87	(.55-1.38)	1,013	.94	.78	(.42-1.48)
Hispanic	2,996	.84	1.12	(.82-1.52)	1,574	1.12	1.42	(.85-2.35)	1,065	.95	.99	(.52-1.89)
Other	144	.71	1.03	(.49-2.16)	101	.59	.77	(.29-2.02)	20	.43	1.63	(.56-4.75)
Parent birth cohorts (vs. before 1945)												
Cohort 2 (1946-1948)	2,119	.66 *	.88	(.62-1.24)	983	1.29	1.27	(.68-2.38)	222	.91	.96	(.50-1.83)
Cohort 3 (1949-1953)	1,066	.59 ***	.88	(.62-1.26)	579	.98	.92	(.56-1.51)	283	1.05	1.21	(.62-2.37)
Cohort 4 (1954-1956)	1,951	.32 ***	.60 *	(.38-.95)	1,097	.38 ***	.40 *	(.17-.96)	613	.73	1.03	(.51-2.09)
Cohort 5 (1957-1959)	1,235	.46 ***	1.00	(.63-1.60)	723	.77	1.25	(.50-3.11)	401	.76	1.01	(.45-2.25)
Cohort 6 (1960-1962)	1,379	.36 ***	.96	(.58-1.61)	924	.47 *	.77	(.25-2.36)	399	.62	1.49	(.70-3.16)
Cohort 7 (1963-1964)	1,165	.23 ***	.76	(.35-1.63)	528	.06 ***	.09 *	(.01-.96)	625	.40 *	1.26	(.48-3.34)
Cohort 8 (after 1965)	366	.30 **	2.46	(.99-6.12)	87	.10 *	.33	(.04-2.72)	279	.50	3.86 **	(1.45-10.23)
Parent education (vs. < high school)	182				36				146			
High school graduate	3,128	1.40 **	1.46 **	(1.11-1.92)	1,587	1.43	1.22	(.72-2.07)	999	1.31	1.62	(1.00-2.61)
Some college	3,283	1.39 *	1.52 **	(1.12-2.08)	1,707	1.38	1.21	(.67-2.20)	1,031	1.33	1.55	(.80-2.99)
College graduate	1,793	1.31	1.51 *	(1.04-2.20)	935	1.18	1.47	(.72-3.00)	582	1.36	1.94	(.89-4.19)
Parent marital status (vs. married)	1,258				728				356			
Widowed	6,600	2.45 ***	1.93 **	(1.26-2.97)	3,444	.64	.36	(.10-1.29)	1,987	1.54	1.31	(.48-3.59)
Divorced/separated	313	1.43 **	1.30	(.99-1.71)	129	2.01 ***	1.40	(.79-2.46)	78	1.25	1.08	(.64-1.81)
Never married	1,759	.81	.89	(.56-1.42)	968	.80	1.07	(.51-2.25)	598	.83	.90	(.40-2.00)
Region of country (vs. West)												
South	2,115	.61 ***	.63 **	(.45-.88)	1,199	.59 *	.57	(.28-1.16)	613	.73	.74	(.42-1.31)
North Central	3,945	.78	.78	(.55-1.11)	2,009	.74	.66	(.31-1.38)	1,375	.77	.64	(.35-1.17)
Northeast	1,834	.93	.79	(.57-1.09)	918	.68	.67	(.33-1.33)	558	1.01	.71	(.41-1.22)
Household income (vs. <\$8,999)	1,569				831				422			
\$9,000-19,999					657	1.10	1.18	(.59-2.38)	364	1.00	.91	(.43-1.92)
\$20,000-39,999					1,157	1.67	1.54	(.79-3.03)	751	.85	.64	(.30-1.37)
\$40,000-74,999					1,579	1.39	1.08	(.48-2.44)	947	1.28	.85	(.38-1.86)
\$75,000+					1,206	1.53	.76	(.28-2.03)	698	1.18	.82	(.34-1.98)
					358				208			

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.5 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Former/Current Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
Population density (vs. MSA with 1 million+)												
MSA with <1 million					586	1.06	.96	(.57-1.59)	1,276	.88	.88	(.62-1.25)
Not in MSA					831	.81	.79	(.40-1.56)	977	.77	.80	(.51-1.26)
Parent Former/Current Substance Use					3,540				715			
Marijuana (vs. never)												
Former	6,379	1.61 ***	2.38 ***	(1.81-3.14)	3,210	2.24 ***	2.00 **	(1.22-3.29)	1,952	1.77 *	1.66 *	(1.09-2.53)
Last year	2,512	2.26 ***	2.97 ***	(1.78-4.95)	1,449	2.75 ***	1.98	(.73-5.37)	851	2.09 ***	1.69	(.71-4.03)
Cigarette (vs. never)	572	2.28 ***	1.77 ***	(1.29-2.42)	298	3.28 ***	2.71 **	(1.47-4.97)	165	2.48 ***	2.49 ***	(1.52-4.10)
Former	2,517	2.93 ***	1.89 ***	(1.37-2.61)	1,435	4.22 ***	2.85 **	(1.47-5.52)	804	2.32 ***	2.25 ***	(1.41-3.59)
Last year	3,662	2.12 ***	1.47	(.83-2.61)	1,723	1.90	.91	(.41-2.03)	987	2.29 *	1.58	(.76-3.27)
Alcohol (vs. never)	1,364	3.60 ***	2.25 **	(1.37-3.68)	1,799	2.83 ***	1.09	(.50-2.37)	1,177	2.85 ***	1.70	(.87-3.34)
Former	1,754	1.39 *	1.35	(.88-2.06)	694	2.20 **	2.30 *	(1.05-5.05)	520	1.39	1.32	(.76-2.29)
Last year	6,345	2.33 **	1.87	(.85-4.12)	427	3.42 **	3.56	(.87-14.58)	254	2.57 *	4.01 *	(1.20-13.43)
Cocaine (vs. never)	8,535				4,412				2,658			
Former	722				118				56			
Last year	206											
Parent Personal Characteristics												
Risk of occasional marijuana use (vs. great risk)												
Moderate risk					2,405							
Slight/no risk					1,327	1.14	1.05	(.68-1.62)				
Missing <sup>4</sup>					1,160	1.32	.68	(.41-1.14)				
Delinquency					99	.35	.02 *	(.00-.33)				
Major depressive episode in last year (vs. not)						1.25	.91	(.61-1.36)				
Major depressive episode									2,695			
General anxiety disorder in last year (vs. not)									273	1.49	1.23	(.67-2.25)
General anxiety disorder									2,888			
									80	1.19	.71	(.28-1.75)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.5 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Former/Current Use of Four Substances and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Child Sociodemographics</b>												
Child sex (vs. female)	4,807	1.36 **	1.42 **	(.115-1.76)	2,512	1.73 **	1.05	(.67-1.62)	1,498	1.34 *	1.98 ***	(1.46-2.68)
Child age at survey (vs. age 15)	1,262				642				377			
12	1,703	.07 ***	.06 **	(.03-.12)	891	.10 ***	.12 **	(.03-.46)	511	.09 ***	.07 ***	(.03-.18)
13	1,621	.26 ***	.23 ***	(.14-.39)	872	.23 **	.22 **	(.07-.69)	489	.14 ***	.12 ***	(.05-.31)
14	1,470	.49 ***	.45 ***	(.29-.69)	742	.40 **	.45	(.20-1.02)	451	.42 *	.34 *	(.15-.79)
16	1,273	1.65 ***	1.78 ***	(1.29-2.46)	646	1.65	1.32	(.84-2.69)	376	1.50	1.43	(.81-2.51)
17	1,063	1.90 ***	2.21 ***	(1.53-3.18)	538	1.74	1.72	(.84-3.58)	320	2.03 *	1.83	(.81-4.14)
18	248	1.12	1.43	(.76-2.67)	138	1.91	1.27	(.41-3.86)	109	1.21	1.83	(.70-4.74)
19	189	2.21 **	3.47 ***	(1.90-6.33)	102	3.10 **	3.37 *	(1.13-10.03)	87	3.11 **	4.61 ***	(1.89-11.24)
20	155	2.96 ***	5.41 ***	(2.93-10.01)	92	5.22 ***	7.37 ***	(2.25-24.15)	63	3.03 *	5.80 **	(1.83-18.39)
21	120	2.27 *	4.71 ***	(2.00-10.07)	71	4.70 **	7.31 **	(2.02-26.40)	49	1.40	2.30	(.55-9.53)
22	113	1.49	1.44	(.51-4.08)	71	2.16	1.71	(.41-7.09)	42	2.47	3.90	(.97-15.59)
23	99	.98	.49	(.19-1.31)	63	1.66	.69	(.10-4.91)	36	1.08	1.59	(.36-7.00)
24	73	2.76 *	1.76	(.55-5.60)	43	3.94 *	6.14 *	(1.06-35.44)	30	3.81	7.64 **	(1.44-40.43)
25	74	1.28	.91	(.34-2.40)	46	1.33	2.26	(.24-21.42)	28	2.59	5.34 *	(1.11-25.70)
Child birth cohort (vs. 1962-1964) <sup>5</sup>	340				189							(vs. 1965-1974)
Cohort 2 (1965-1969)	833	.36 ***	.87	(.56-1.37)	895	1.02	1.01	(.31-3.27)	221			
Cohort 3 (1970-1974)	1,452	.41 ***	.25 ***	(.15-.40)		.34 **	1.12	(.28-4.49)	1,072	.68	.91	(.32-2.61)
Cohort 4 (1975-1979)	4,518	.21 ***	.24 ***	(.15-.37)	645	.09 ***	2.12	(.31-14.50)	1,675	.15 ***	.70	(.21-2.29)
Cohort 5 (1980-1984)	2,320	.08 ***	.28 ***	(.16-.51)	4,665	5.09 ***	3.30 **	(1.43-7.62)	2,741	2.01 **	1.64	(.82-3.30)
High school dropout (vs. non-dropout)	8,909	2.86 **	2.29 ***	(1.41-3.73)	292				227			
Dropout	554											
<b>Child Personal Characteristics</b>												
Risk of occasional marijuana use (vs. great risk)												
Moderate risk					4,67	4.67 ***	4.30 ***	(2.30-8.04)				
Slight/no risk					20,07	20.07 ***	11.81 ***	(7.10-19.65)				
Missing <sup>4</sup>					905	9.09 ***	21.79 ***	(3.22-147.5)				
Child delinquency in past year					56	1.58 ***	1.57 ***	(1.41-1.76)				
Behavioral problem in past six months (vs. no problem)									1,975			
Problem									476	4.48 ***	4.11 ***	(2.71-6.23)
Missing <sup>4</sup>									73	1.40	2.44	(.75-7.97)
Missing <sup>6,7</sup>									444	4.36 ***	1.00	(1.00-1.00)
Emotional problem in past six month (vs. no problem)									2,098			
Problem									353	2.41 ***	1.39	(.84-2.30)
Missing <sup>4,7</sup>									73	1.05	1.00	(1.00-1.00)
Missing <sup>6,7</sup>									444	3.26 ***	1.00	(1.00-1.00)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.6. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Lifetime Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>1</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.97	.74 **	(.59-.92)	1,544	.94	.75	(.49-1.13)	845	.73	.58 **	(.37-.91)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.84	.68 **	(.52-.90)	1,515	.96	.73	(.47-1.13)	1,013	.89	.57 *	(.33-.98)
Hispanic	2,996	.88	.94	(.72-1.25)	1,574	1.16	1.18	(.73-1.91)	1,065	.98	.78	(.45-1.35)
Other	144	.68	.95	(.48-1.86)	101	.59	.76	(.32-1.78)	20	.30 *	1.03	(.39-2.70)
Parent birth cohorts (vs. before 1945)	2,119				983				222			
Cohort 2 (1946-1948)	1,066	.67 **	.95	(.70-1.28)	579	.94	1.13	(.67-1.92)	283	.81	1.00	(.55-1.82)
Cohort 3 (1949-1953)	1,951	.55 ***	.93	(.67-1.30)	1,097	.71	.98	(.60-1.60)	613	.81	1.15	(.60-2.20)
Cohort 4 (1954-1956)	1,235	.29 ***	.62 *	(.42-.91)	723	.29 ***	.48 *	(.25-.90)	401	.53 *	.96	(.49-1.86)
Cohort 5 (1957-1959)	1,379	.41 ***	1.02	(.67-1.55)	924	.53 **	1.26	(.61-2.61)	399	.54 *	.94	(.44-2.01)
Cohort 6 (1960-1962)	1,165	.27 ***	.89	(.55-1.43)	528	.30 ***	.78	(.30-1.99)	625	.39 ***	1.19	(.57-2.46)
Cohort 7 (1963-1964)	366	.25 ***	1.02	(.55-1.90)	87	.03 ***	.08 *	(.01-.66)	279	.39 **	1.59	(.65-3.91)
Cohort 8 (after 1965)	182	.23 ***	2.70 *	(1.15-6.34)	36	.05 **	.22	(.04-1.29)	146	.34 **	3.85 **	(1.53-9.66)
Parent education (vs. < high school)	3,128				1,587				999			
High school graduate	3,283	1.21	1.27	(.99-1.64)	1,707	1.06	1.10	(.68-1.78)	1,031	1.19	1.31	(.88-1.96)
Some college	1,793	1.16	1.30	(.96-1.76)	935	1.05	1.11	(.67-1.84)	582	1.03	1.05	(.61-1.79)
College graduate	1,258	1.01	1.20	(.84-1.70)	728	.85	1.20	(.63-2.29)	356	.92	1.14	(.60-2.17)
Parent marital status (vs. married)	6,500				3,444				1,987			
Widowed	313	2.82 ***	2.21 ***	(1.44-3.39)	129	1.51	.69	(.29-1.68)	78	2.65 *	2.05	(.81-5.18)
Divorced/separated	1,759	1.35 **	1.18	(.90-1.55)	968	1.57 **	.89	(.54-1.46)	598	1.45 *	1.28	(.79-2.07)
Never married	791	.86	.99	(.66-1.50)	416	.79	.95	(.49-1.84)	305	.93	1.15	(.61-2.17)
Region of country (vs. West)	2,115				1,199				613			
South	3,945	.63 ***	.59 ***	(.44-.79)	2,009	.69	.64	(.35-1.16)	1,375	.64 *	.64	(.36-1.07)
North Central	1,834	.77	.73	(.53-1.01)	918	.74	.61	(.30-1.21)	558	.82	.68	(.39-1.17)
Northeast	1,569	.95	.76	(.56-1.03)	831	.89	.81	(.45-1.49)	422	.93	.61	(.37-1.01)
Household income (vs. <\$8,999)					657				364			
\$9,000-19,999					1,157	1.06	1.02	(.58-1.80)	751	1.20	1.23	(.62-2.45)
\$20,000-39,999					1,579	1.48	1.35	(.78-2.33)	947	1.06	.92	(.44-1.92)
\$40,000-74,999					1,206	1.28	.86	(.46-1.60)	698	1.54	1.31	(.58-2.96)
\$75,000+					358	1.64	.93	(.42-2.03)	208	1.22	1.21	(.51-2.89)
Population density (vs. MSA with 1 million+)					586				1,276			
MSA with <1 million					831	.87	.71	(.46-1.08)	977	.97	1.03	(.73-1.46)
Not in MSA					3,540	.84	.95	(.55-1.59)	715	.81	.87	(.58-1.32)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Estimate not calculated because of zero cells.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.6 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Lifetime Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Lifetime Frequency</b>												
Marijuana use in lifetime (vs. never)	6,379				3,210				1,952			
1-10 times	1,718	1.58 ***	2.54 ***	(1.88-3.43)	1,010	1.74 **	2.12 **	(1.23-3.64)	505	1.79 **	1.89 *	(1.24-2.88)
11-99 times	634	1.73 **	3.10 ***	(2.04-4.71)	350	2.31 **	2.94 ***	(1.58-5.45)	224	1.39	1.35	(.72-2.52)
100+ times	701	1.61 ***	2.60 ***	(1.68-4.02)	372	2.25 ***	2.37 *	(1.09-5.17)	279	1.52 *	1.53	(.78-2.99)
Missing <sup>4</sup>	31	1.05	1.56	(.51-4.72)	15	1.78	2.74	(.49-15.19)	8	1.12	1.48	(.26-8.43)
<b>Cigarette (vs. never)</b>	2,517				1,435				804			
Former	3,284	1.74 ***	1.33	(.99-1.80)	1,723	1.71 **	1.17	(.73-1.87)	987	1.96 **	2.05 *	(1.22-3.45)
Last year	3,662	2.33 ***	1.58 **	(1.18-2.12)	1,799	2.34 ***	1.57	(.93-2.64)	1,177	1.96 ***	1.98 *	(1.24-3.15)
<b>Alcohol (vs. never)</b>	1,364				694				520			
Former	1,754	2.24 ***	1.74 *	(1.09-2.75)	901	2.64 **	2.16	(1.17-3.99)	535	2.07 *	1.61	(.79-3.28)
Last year	6,345	3.13 ***	2.42 ***	(1.63-3.61)	3,362	2.74 ***	1.76	(.95-3.25)	1,913	2.51 ***	1.78	(.95-3.31)
<b>Cocaine use in lifetime (vs. never)</b>	8,535				4,412				2,658			
1-10 times	505	1.55 **	1.62 *	(1.05-2.51)	309	1.88 **	1.67	(.77-3.65)	148	1.59	2.02 *	(1.06-3.88)
11-99 times	228	1.24	1.39	(.72-2.65)	134	2.07 *	3.22	(.90-11.47)	79	1.22	1.58	(.66-3.82)
100+ times	183	2.11 **	2.95 ***	(1.64-5.29)	93	2.40 *	2.84 *	(1.04-7.81)	81	2.51 **	4.41 *	(1.80-10.82)
Missing <sup>4,5</sup>	12				9				2			
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (great risk)					2,405							
Moderate risk					1,327	1.01	1.04	(.71-1.53)				
Slight/no risk					1,160	1.48 *	1.14	(.72-1.80)				
Missing <sup>4</sup>					99	1.13	.14	(.01-2.55)				
Delinquency in past year					4,957	1.14	1.53 ***	(1.38-1.70)				
Major depressive episode in past year (vs. not)									2,695			
General anxiety disorder												
Major depressive episode												
General anxiety disorder in past year (vs. not)												
General anxiety disorder												

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

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<sup>5</sup> Estimate not calculated because of zero cells.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.6 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Lifetime Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Child Sociodemographics</b>												
Child sex (vs. female)	4,807	1.21 *	1.26 *	(1.02-1.55)	2,512	1.40 *	.90	(.61-1.31)	1,498	1.11	1.63 ***	(1.26-2.11)
Child age at survey (vs. age 15)	1,262				642				377			
12	1,703	0.05 ***	.04 ***	(.02-.09)	891	.08 ***	.08 ***	(.02-.31)	511	.07 ***	.05 ***	(.02-.12)
13	1,621	0.22 ***	.19 ***	(.12-.32)	872	.21 ***	.21 **	(.08-.54)	489	.12 ***	.10 ***	(.04-.24)
14	1,470	0.44 ***	.40 ***	(.27-.59)	742	.35 ***	.40 *	(.20-.81)	451	.38 **	.31 **	(.14-.65)
16	1,273	1.55 **	1.64 **	(1.20-2.24)	646	1.56	1.22	(.68-2.20)	376	1.41	1.25	(.71-2.22)
17	1,063	1.96 ***	2.21 ***	(1.57-3.10)	538	2.18 **	2.14 *	(1.03-4.46)	320	1.89 *	1.55	(.74-3.25)
18	248	1.18	1.37	(.79-2.38)	138	1.73	.88	(.33-2.34)	109	1.75	2.70 *	(1.20-6.08)
19	189	3.48 ***	5.36 ***	(2.91-9.86)	102	6.69 ***	5.72 **	(1.80-18.15)	87	3.43 ***	4.85 ***	(2.19-10.71)
20	155	3.47 ***	5.94 ***	(3.16-11.17)	92	6.50 ***	6.89 **	(2.13-22.26)	63	3.42 **	5.24 **	(1.71-16.03)
21	120	4.12 ***	7.93 ***	(3.93-15.98)	71	6.45 ***	6.29 ***	(2.12-18.64)	49	5.68 ***	6.08 **	(1.96-18.83)
22	113	1.76	1.57	(.60-4.08)	71	2.37	1.12	(.30-4.16)	42	3.79 **	3.52	(.95-13.08)
23	99	4.55 ***	3.18 **	(1.41-7.17)	63	9.34 ***	5.40 *	(1.30-22.46)	36	3.43 *	3.15	(.70-14.16)
24	73	5.72 ***	4.32 ***	(2.01-9.29)	43	9.42 ***	8.40 **	(1.99-35.43)	30	6.99 ***	8.39 **	(2.04-34.57)
25	74	4.94 ***	3.90 ***	(1.83-8.29)	46	8.81 ***	12.98 **	(2.19-76.85)	28	5.27 **	6.03 *	(1.49-24.50)
Child birth cohort (vs. 1962-1964)	340											
Cohort 2 (1965-1969)	833	.38 ***	.82	(.54-1.24)	189				15			
Cohort 3 (1970-1974)	1,452	.51 ***	.27 ***	(.18-.40)	895	.46 *	.65	(.26-1.60)	206	1.14	1.37	(.39-4.84)
Cohort 4 (1975-1979)	4,518	.18 ***	.20 ***	(.13-.28)	3,228	.11 ***	.40	(.13-1.30)	1,072	.36	.71	(.17-2.97)
Cohort 5 (1980-1984)	2,320	.06 ***	.21 ***	(.13-.35)	645	.02 ***	.67	(.13-3.39)	1,675	.07 ***	.51	(.11-2.40)
High school dropout (vs. non-dropout)	8,909				4,665				2,741			
Dropout	554	3.20 ***	2.29 ***	(1.51-3.45)	292	5.07 ***	2.62 **	(1.42-4.85)	227	2.24 ***	1.50	(.77-2.92)
<b>Child Personal Characteristics</b>												
Risk of occasional marijuana use (great risk)												
Moderate risk												
Slight/no risk												
Missing <sup>4</sup>												
Child delinquency in past year												
Behavioral problem in past six months (vs. no problem)												
Problem												
Missing <sup>4</sup>												
Missing <sup>6,7</sup>												
Emotional problem in past six months (vs. no problem)												
Problem												
Missing <sup>4,7</sup>												
Missing <sup>6,7</sup>												
1 In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.												
2 Weighted estimates with SUDAAN PROC LOGISTIC; unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.												
3 Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.												
4 Respondents were asked but did not report.												
5 Estimate not calculated because of zero cells.												
6 Not ascertained for children aged 18-25.												
7 Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.												
*p<.05; **p<.01; ***p<.001, T-test.												
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.												

Table A.6.7. Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Lifetime Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.96	.73 *	(.57-.93)	1,544	.90	.75	(.45-1.26)	845	.84	.70	(.43-1.14)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.85	.84	(.63-1.12)	1,515	.94	.86	(.53-1.38)	1,013	.94	.78	(.41-1.47)
Hispanic	2,996	.84	1.13	(.83-1.53)	1,574	1.12	1.41	(.86-2.32)	1,065	.95	1.01	(.53-1.92)
Other	144	.71	1.06	(.51-2.22)	101	.59	.84	(.32-2.20)	20	.43	1.62	(.54-4.89)
Parent birth cohorts (vs. before 1945)	2,119				983				222			
Cohort 2 (1946-1948)	1,066	.66 *	.88	(.62-1.24)	579	1.29	1.27	(.69-2.33)	283	.91	.96	(.50-1.84)
Cohort 3 (1949-1953)	1,951	.59 ***	.89	(.62-1.27)	1,097	.98	.92	(.56-1.53)	613	1.05	1.23	(.63-2.43)
Cohort 4 (1954-1956)	1,235	.32 ***	.59 *	(.37-.95)	723	.38 ***	.38 *	(.16-.92)	401	.73	1.06	(.52-2.17)
Cohort 5 (1957-1959)	1,379	.46 ***	.96	(.59-1.55)	924	.77	1.09	(.42-2.81)	399	.76	1.07	(.48-2.39)
Cohort 6 (1960-1962)	1,165	.36 ***	.95	(.56-1.61)	528	.47 *	.75	(.24-2.34)	625	.62	1.52	(.71-3.28)
Cohort 7 (1963-1964)	366	.23 ***	.73	(.34-1.59)	87	.06 ***	.07 *	(.01-.84)	279	.40 *	1.30	(.50-3.38)
Cohort 8 (after 1965)	182	.30 **	2.48 *	(1.01-2.21)	36	.10 *	.26	(.03-2.07)	146	.50	4.19 **	(1.58-11.12)
Parent education (vs. < high school)	3,128				1,587				999			
High school graduate	3,283	1.40 **	1.46 **	(1.11-1.92)	1,707	1.43	1.27	(.75-2.15)	1,031	1.31	1.58	(.98-2.54)
Some college	1,793	1.39 *	1.52 **	(1.12-2.07)	935	1.38	1.23	(.67-2.24)	582	1.33	1.54	(.81-2.92)
College graduate	1,258	1.31	1.52 *	(1.04-2.21)	728	1.18	1.47	(.72-2.99)	356	1.36	1.95	(.89-4.26)
Parent marital status (vs. married)	6,600				3,444				1,987			
Widowed	313	2.45 ***	1.96 **	(1.28-2.99)	129	.64	.36	(.10-1.28)	78	1.54	1.25	(.46-3.46)
Divorced/separated	1,759	1.43 **	1.31	(1.00-1.71)	968	2.01 ***	1.33	(.76-2.31)	598	1.25	1.06	(.63-1.78)
Never married	791	.81	.92	(.58-1.45)	416	.80	1.13	(.54-2.38)	305	.83	.88	(.39-1.95)
Region of country (vs. West)	2,115				1,199				613			
South	3,945	.61 ***	.64 **	(.46-.89)	2,009	.59 *	.59	(.31-1.13)	1,375	.73	.77	(.43-1.37)
North Central	1,834	.78	.79	(.55-1.13)	918	.74	.66	(.33-1.33)	558	.77	.66	(.36-1.22)
Northeast	1,569	.93	.79	(.57-1.09)	831	.68	.68	(.36-1.28)	422	1.01	.74	(.42-1.29)
Household income (vs. <\$8,999)					657				364			
\$9,000-19,999					1,157	1.10	1.16	(.57-2.37)	751	1.00	.89	(.43-1.87)
\$20,000-39,999					1,579	1.67	1.57	(.81-3.04)	947	.85	.63	(.30-1.32)
\$40,000-74,999					1,206	1.39	1.04	(.47-2.32)	698	1.28	.83	(.37-1.82)
\$75,000+					358	1.53	.72	(.28-1.86)	208	1.18	.79	(.33-1.91)
Population density (vs. MSA with 1 million+)					586				1,276			
MSA with <1 million					831	1.06	.93	(.56-1.53)	977	.88	.88	(.62-1.26)
Not in MSA					3,540	.81	.76	(.40-1.46)	715	.77	.81	(.51-1.29)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Estimate not calculated because of zero cells.

<sup>6</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.7 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Lifetime Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Lifetime Frequency</b>												
Marijuana use in lifetime (vs. never)	6,379				3,210				1,952			
1-10 times	1,718	1.60 ***	2.28 ***	(1.70-3.08)	1,010	1.98 **	1.83 *	(1.06-3.16)	505	1.89 ***	1.68 *	(1.09-2.59)
11-99 times	634	1.90 ***	3.00 ***	(1.93-4.66)	350	2.84 ***	2.86 **	(1.46-5.60)	224	1.63	1.39	(.70-2.76)
100+ times	701	1.82 ***	2.78 ***	(1.78-4.33)	372	2.77 ***	2.08	(.93-4.69)	279	1.87 **	2.04 *	(1.02-4.08)
Missing <sup>4</sup>	31	1.56	2.50	(.80-7.77)	15	3.14	8.13 **	(1.88-35.10)	8	1.64	2.42	(.36-16.08)
<b>Cigarette (vs. never)</b>	2,517				1,435				804			
Former	3,284	2.28 ***	1.75 ***	(1.28-2.39)	1,723	3.28 ***	2.68 **	(1.46-4.93)	987	2.48 ***	2.55 ***	(1.54-4.23)
Last year	3,662	2.93 ***	1.87 ***	(1.36-2.58)	1,799	4.22 ***	2.84 **	(1.46-5.53)	1,177	2.32 ***	2.26 ***	(1.41-3.62)
<b>Alcohol (vs. never)</b>	1,364				694				520			
Former	1,754	2.12 ***	1.43	(.81-2.54)	901	1.90	.90	(.40-2.01)	535	2.29 *	1.47	(.71-3.04)
Last year	6,345	3.60 ***	2.28 **	(1.39-3.73)	3,362	2.83 ***	1.13	(.52-2.46)	1,913	2.85 ***	1.70	(.87-3.35)
<b>Cocaine use in lifetime (vs. never)</b>	8,535				4,412				2,658			
1-10 times	505	1.42 *	1.15	(.71-1.85)	309	2.05 **	1.53	(.76-3.07)	148	1.40	1.26	(.62-2.58)
11-99 times	228	1.49	1.41	(.72-2.74)	134	2.73 *	4.63 *	(1.23-17.39)	79	1.50	1.35	(.54-3.39)
100+ times	183	2.26 **	2.47 **	(1.36-4.48)	93	3.89 **	4.77 **	(1.74-13.08)	81	1.88 *	1.92	(.80-4.58)
Missing <sup>4,5</sup>	12				9				2			
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (vs. great)					2,405							
Moderate risk					1,327	1.14	1.04	(.68-1.60)				
Slight/no risk					1,160	1.32	.66	(.40-1.08)				
Missing <sup>4</sup>					99	.35	.02 *	(.00-.29)				
Delinquency						1.25	.87	(.60-1.28)				
Major depressive episode in last year (vs. Major depressive episode)									2,695			
General anxiety disorder in last year (vs. not)									273	1.49	1.26	(.68-2.33)
General anxiety disorder									2,888	1.19	.69	(.28-1.68)
<b>Child Sociodemographics</b>									80			
Child sex (vs. female)	4,807	1.36 **	1.42 **	(1.15-1.75)	2,512	1.73 **	1.00	(.66-1.52)	1,498	1.34 *	1.97 *	(1.46-2.67)
Child age at survey (vs. age 15)	1,262				642				377			
12	1,703	.07 ***	.06 ***	(.03-.12)	891	.10 ***	.12 *	(.03-.49)	511	.09 ***	.07 *	(.03-.17)
13	1,621	.26 ***	.24 ***	(.14-.40)	872	.23 **	.23 *	(.07-.70)	489	.14 ***	.12 *	(.04-.31)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Estimate not calculated because of zero cells.

<sup>6</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.7 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Lifetime Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)					PANEL B 1991-1994A (N=4,872) <sup>3</sup>					PANEL C 1994B-1996 (N=2,968)				
	N	OR	AOR	95% CI		N	OR	AOR	95% CI		N	OR	AOR	95% CI	
14	1,470	.49 ***	.45 ***	(.29-.69)		742	.40 **	.47	(.20-1.09)		451	.42 *	.36 *	(.16-.81)	
16	1,273	1.65 ***	1.76 ***	(1.27-2.43)		646	1.65	1.33	(.65-2.70)		376	1.50	1.44	(.81-2.56)	
17	1,063	1.90 ***	2.18 ***	(1.51-3.15)		538	1.74	1.74	(.81-3.72)		320	2.03 *	1.84	(.80-4.23)	
18	248	1.12	1.36	(.73-2.56)		138	1.91	1.25	(.42-3.74)		109	1.21	1.80	(.68-4.78)	
19	189	2.21 **	3.41 ***	(1.85-6.27)		102	3.10 **	3.04 *	(1.01-9.15)		87	3.11 **	4.68 ***	(1.90-11.55)	
20	155	2.96 ***	5.28 ***	(2.84-9.81)		92	5.22 ***	6.98 **	(2.09-23.30)		63	3.03 *	5.20 **	(1.86-18.22)	
21	120	2.27 *	4.67 ***	(2.00-10.90)		71	4.70 **	7.46 **	(2.10-26.51)		49	1.40	2.30	(.56-9.50)	
22	113	1.49	1.39	(.49-3.95)		71	2.16	1.72	(.42-6.99)		42	2.47	3.89	(.98-15.50)	
23	99	.98	.48	(.18-1.28)		63	1.66	.67	(.09-4.99)		36	1.08	1.65	(.38-7.15)	
24	73	2.76 *	1.70	(.55-5.29)		43	3.94 *	6.82 *	(1.14-40.69)		30	3.81	7.82 *	(1.42-42.99)	
25	74	1.28	.88	(.34-2.33)		46	1.33	1.96	(.18-20.88)		28	2.59	5.37 *	(1.112-25.74)	
Child birth cohort (vs. 1962-1964) <sup>6</sup>	340								(vs. 1965-1969)					(vs. 1965-1974)	
Cohort 2 (1965-1969)	833	.36 ***	.88	(.56-1.37)		189									
Cohort 3 (1970-1974)	1,452	.41 ***	.25 ***	(.15-.40)		895	1.02	1.04	(.33-3.30)		221				
Cohort 4 (1975-1979)	4,518	.21 ***	.23 ***	(.15-.37)		3,228	.34 **	1.12	(.28-4.44)		1,072	.68	.90	(.31-2.57)	
Cohort 5 (1980-1984)	2,320	.08 ***	.27 ***	(.15-.49)		645	.09 ***	2.20	(.32-15.05)		1,675	.15 ***	.67	(.21-2.20)	
High school dropout (vs. non-dropout)	8,909					4,665					2,741				
Dropout	554	2.86 **	2.36 ***	(1.40-3.62)		292	5.09 ***	3.59 **	(1.58-8.15)		227	2.01 **	1.62	(.81-3.27)	
<b>Child Personal Characteristics</b>															
Risk of occasional marijuana use (vs. great risk)															
Moderate risk						2,568									
Slight/no risk						1,428	4.67 ***	4.20 ***	(2.27-7.77)						
Missing <sup>4</sup>						905	20.07 ***	11.90 ***	(7.07-20.01)						
Child delinquency in past year						56	9.09 ***	20.71 **	(3.00-142.90)						
Behavioral problem in past six months (vs. no problem)							1.58 ***	1.59 ***	(1.42-1.78)		1,975				
Problem															
Missing <sup>4</sup>															
Missing <sup>7,a</sup>															
Emotional problem in past six month (vs. no problem)															
Problem															
Missing <sup>4,a</sup>															
Missing <sup>7,a</sup>															

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC; unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> Estimate not calculated because of zero cells.

<sup>6</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>a</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.8. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Last Year Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.97	.71 **	(.57-.90)	1,544	.94	.74	(.49-1.12)	845	.73	.55 **	(.35-.86)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.84	.69 **	*.53-.91)	1,515	.96	.79	(.51-1.21)	1,013	.89	.57 *	(.33-.99)
Hispanic	2,996	.88	1.00	(.75-1.33)	1,574	1.16	1.21	(.75-1.96)	1,065	.98	.77	(.44-1.34)
Other	144	.68	.94	(.47-1.90)	101	.59	.76	(.32-1.82)	20	.30 *	.90	(.33-2.43)
Parent birth cohorts (vs. before 1945)	2,119				983				222			
Cohort 2 (1946-1948)	1,066	.67 **	.98	(.72-1.34)	579	.94	1.12	(.66-1.90)	283	.81	.98	(.52-1.83)
Cohort 3 (1949-1953)	1,951	.55 ***	.95	(.68-1.32)	1,097	.71	.97	(.59-1.57)	613	.81	1.12	(.58-2.15)
Cohort 4 (1954-1956)	1,235	.29 ***	.64 *	(.44-.94)	723	.29 ***	.49 *	(.26-.92)	401	.53 *	.93	(.47-1.83)
Cohort 5 (1957-1959)	1,379	.41 ***	1.07	(.71-1.62)	924	.53 **	1.37	(.67-2.78)	399	.54 *	.88	(.41-1.89)
Cohort 6 (1960-1962)	1,165	.27 ***	.94	(.59-1.50)	528	.30 ***	.80	(.31-2.04)	625	.39 ***	1.13	(.53-2.41)
Cohort 7 (1963-1964)	366	.25 ***	1.05	(.55-2.00)	87	.03 ***	.08 *	(.01-.63)	279	.39 **	1.59	(.63-4.05)
Cohort 8 (after 1965)	182	.23 ***	2.87 *	(1.18-6.99)	36	.05 **	.25	(.04-1.69)	146	.34 **	3.41 *	(1.33-8.78)
Parent education (vs. < high school)	3,128				1,587				999			
High school graduate	3,283	1.21	1.29	(1.00-1.67)	1,707	1.06	1.02	(.84-1.62)	1,031	1.19	1.29	(.85-1.97)
Some college	1,793	1.16	1.30	(.96-1.77)	935	1.05	1.06	(.65-1.74)	582	1.03	1.06	(.61-1.82)
College graduate	1,258	1.01	1.17	(.83-1.67)	728	.85	1.15	(.60-2.19)	356	.92	1.20	(.63-2.28)
Parent marital status (vs. married)	6,600				3,444				1,987			
Widowed	313	2.82 ***	2.20 ***	(1.43-3.37)	129	1.51	.78	(.34-1.17)	78	2.65 *	2.24	(.84-5.99)
Divorced/separated	1,759	1.35 **	1.17	(.90-1.53)	968	1.57 **	.90	(.55-1.47)	598	1.45 *	1.33	(.82-2.14)
Never married	791	.86	1.02	(.67-1.53)	416	.79	.95	(.48-1.87)	305	.93	1.21	(.62-2.33)
Region of country (vs. West)	2,115				1,199				613			
South	3,945	.63 ***	.59 ***	(.43-.79)	2,009	.69	.63	(.34-1.18)	1,375	.64 *	.63	(.37-1.07)
North Central	1,834	.77	.73 *	(.53-1.01)	918	.74	.59	(.28-1.22)	558	.82	.65	(.38-1.14)
Northeast	1,569	.95	.76	(.56-1.03)	831	.89	.79	(.42-1.49)	422	.93	.58 *	(.35-.96)
Household income (vs. <\$8,999)					657				364			
\$9,000-19,999					1,157	1.06	1.01	(.56-1.83)	751	1.20	1.29	(.62-2.66)
\$20,000-39,999					1,579	1.48	1.36	(.77-2.39)	947	1.06	1.00	(.45-2.22)
\$40,000-74,999					1,206	1.28	.88	(.47-1.67)	698	1.54	1.42	(.60-3.32)
\$75,000+					358	1.64	.93	(.40-2.12)	208	1.22	1.27	(.51-3.16)
Population density (vs. MSA with 1 million+)					586				1,276			
MSA with <1 million					831	.87	.72	(.47-1.11)	977	.97	1.06	(.75-1.49)
Not in MSA					3,540	.84	.98	(.57-1.69)	715	.81	.90	(.60-1.34)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>5</sup> Respondents were asked but did not report.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.8 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Last Year Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Last Year Frequency</b>												
Marijuana use in past year (vs. never)	6,379				3,210				1,952			
Former, not past year	2,512	1.55 ***	2.57 ***	(1.95-3.39)	1,449	1.93 ***	2.24 **	(1.38-3.64)	851	1.57 **	1.60 *	(1.07-2.39)
1-200 days	439	1.46 *	2.69 ***	(1.66-4.38)	267	2.01 **	1.53	(.68-3.43)	139	1.73	1.57	(.67-3.65)
200+ days	61	2.30 *	3.69 ***	(1.70-8.04)	31	3.00	4.83 *	(1.32-17.66)	26	3.01 *	2.62	(.67-10.19)
Missing <sup>4</sup>	72	3.56 ***	3.13 **	(1.33-7.40)								
<b>Cigarette use in past month (vs. never)</b>												
Former, not past month	2,517				1,435				804			
<15 cigarettes/day	3,599	1.75 ***	1.37 *	(1.02-1.83)	1,898	1.73 **	1.20	(.75-1.92)	1,055	1.91 **	1.98 **	(1.18-3.31)
16-35 cigarettes/day	1,735	1.88 ***	1.40	(.99-1.98)	823	1.74 *	1.26	(.69-2.32)	653	2.08 ***	2.03 **	(1.28-3.22)
>35 cigarettes/day	1,274	2.75 ***	1.68 **	(1.20-2.35)	634	2.82 ***	1.71	(.96-3.05)	363	2.26 **	2.68 **	(1.40-5.15)
Missing <sup>5</sup>	230	3.27 ***	1.91 *	(1.13-3.25)	98	3.32 **	1.61	(.54-4.81)	62	1.37	.90	(.29-2.83)
<b>Alcohol use in past month (vs. never)</b>												
Former, not past month	1,364	1.37	1.30	(.49-3.45)	69	2.51	1.55	(.39-6.23)	31	.15 **	.13 **	(.02-.74)
<2 drinks/day	3,356	2.32 ***	1.87 **	(1.23-2.84)	694				520			
2+drinks/day	3,293	2.54 ***	2.16 ***	(1.41-3.32)	1,817	2.44 **	1.88 *	(1.04-3.39)	998	2.05 *	1.38	(.71-2.69)
Missing <sup>4</sup>	370	3.50 ***	1.94 *	(1.02-3.69)	2,015	2.92 ***	1.98 *	(1.03-3.80)	1,096	2.56 ***	1.86	(.98-3.54)
Missing <sup>5</sup>	611	6.21 ***	4.04 ***	(2.43-6.71)	232	4.69 ***	2.09	(.79-5.54)	116	2.64 *	2.06	(.80-5.30)
<b>Cocaine (vs. never)</b>												
Former	469	2.37 ***	2.36 ***	(1.45-3.85)	199	1.65	1.04	(.40-2.71)	238	3.18 **	2.31 *	(1.11-4.81)
Last year	8,535				4,412				2,658			
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (great risk)	722	1.45 ***	1.67 **	(1.15-2.43)	427	1.81 **	2.05 *	(1.00-4.21)	254	1.58 *	1.89 *	(1.14-3.12)
Moderate risk	206	1.97 ***	1.85	(.80-4.26)	118	2.73 *	3.92	(.98-15.69)	56	2.19	4.23 *	(1.31-13.68)
Slight/no risk												
Missing <sup>5</sup>												
<b>Delinquency in past year</b>												
Major depressive episode in past year (vs. not)					2,405	1.01	1.02	(.70-1.50)				
Major depressive episode (vs. not)					1,327	1.48 *	1.13	(.71-1.80)				
General anxiety disorder in past year (vs. not)					1,160							
General anxiety disorder (vs. not)					99	1.13	.13	(.01-2.20)				
General anxiety disorder					4,957	1.14	.89	(.59-1.34)	2,695			

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>5</sup> Respondents were asked but did not report.

<sup>6</sup> Not ascertained for children aged 18-25.

<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.8 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Last Year Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Child Sociodemographics</b>												
Child sex (vs. female)	4,807	1.21 *	1.28 *	(1.04-1.57)	2,512	1.40 *	.91	(.62-1.35)	1,498	1.11	1.65 ***	(1.28-2.12)
Child age at survey (vs. age 15)	1,262				642				377			
12	1,703	.05 ***	.04 ***	(.02-.08)	891	.08 ***	.08 ***	(.02-.29)	511	.07 ***	.05 ***	(.02-.12)
13	1,621	.22 ***	.18 ***	(.11-.30)	872	.21 ***	.19 **	(.07-.51)	489	.12 ***	.09 ***	(.04-.24)
14	1,470	.44 ***	.39 ***	(.26-.57)	742	.35 ***	.39 **	(.19-.76)	451	.38 **	.28 **	(.13-.63)
16	1,273	1.55 **	1.67 **	(1.22-2.29)	646	1.56	1.16	(.63-2.12)	376	1.41	1.26	(.70-2.27)
17	1,063	1.96 ***	2.26 ***	(1.60-3.18)	538	2.18 **	2.04 *	(.98-4.25)	320	1.89 *	1.63	(.81-3.28)
18	248	1.18	1.50	(.87-2.58)	138	1.73	.87	(.33-2.29)	109	1.75	2.96 **	(1.36-6.47)
19	189	3.48 ***	5.48 ***	(3.04-9.88)	102	6.69 ***	5.58 **	(1.77-17.57)	87	3.43 ***	5.33 ***	(2.45-11.62)
20	155	3.47 ***	6.45 ***	(3.45-12.06)	92	6.50 ***	6.36 **	(1.99-20.31)	63	3.42 **	5.23 **	(1.72-15.95)
21	120	4.12 ***	8.40 ***	(4.20-16.80)	71	6.45 ***	6.06 ***	(2.04-18.04)	49	5.68 ***	6.19 **	(1.98-19.33)
22	113	1.76	1.98	(.81-4.82)	71	2.37	1.09	(.28-4.17)	42	3.79 **	3.65	(.94-14.17)
23	99	4.55 ***	4.06 ***	(1.76-9.35)	63	9.34 ***	5.23 *	(1.22-22.29)	36	3.43 *	3.58	(.78-16.49)
24	73	5.72 ***	5.68 ***	(2.07-11.96)	43	9.42 ***	7.75 **	(1.72-34.92)	30	6.99 ***	8.80 **	(2.16-35.78)
25	74	4.94 ***	5.17 ***	(2.44-10.92)	46	8.81 ***	13.17 **	(2.23-77.81)	28	5.27 **	6.56 *	(1.54-28.04)
Child birth cohort (vs. 1962-1964)	340											
Cohort 2 (1965-1969)	833	.38 ***	.83	(.54-1.29)	189				15			
Cohort 3 (1970-1974)	1,452	.51 ***	.37 ***	(.23-.59)	895	.46 *	.69	(.27-1.74)	206	1.14	1.40	(.38-5.15)
Cohort 4 (1975-1979)	4,518	.18 ***	.29 ***	(.19-.46)	3,228	.11 ***	.43	(.13-1.42)	1,072	.36	.75	(.18-3.19)
Cohort 5 (1980-1984)	2,320	.06 ***	.33 ***	(.19-.57)	645	.02 ***	.71	(.13-3.83)	1,675	.07 ***	.56	(.12-2.70)
High school dropout (vs. non-dropout)	8,909				4,665				2,741			
Dropout	554	3.20 ***	2.17 ***	(1.45-3.26)	292	5.07 ***	2.64 **	(1.41-4.94)	227	2.24 ***	1.49	(.77-2.88)
<b>Child Personal Characteristics</b>												
Risk of occasional marijuana use (great risk)												
Moderate risk					2,568							
Slight/no risk					1,428							
Missing <sup>5</sup>					905							
Child delinquency in past year					56							
Behavioral problem in past six months (vs. no problem)												
Problem												
Missing <sup>5</sup>												
Missing <sup>6,7</sup>												
Emotional problem in past six months (vs. no problem)												
Problem												
Missing <sup>5,7</sup>												
Missing <sup>6,7</sup>												
Child sex (vs. female)												
Child age at survey (vs. age 15)												
12												
13												
14												
16												
17												
18												
19												
20												
21												
22												
23												
24												
25												
Child birth cohort (vs. 1962-1964)												
Cohort 2 (1965-1969)												
Cohort 3 (1970-1974)												
Cohort 4 (1975-1979)												
Cohort 5 (1980-1984)												
High school dropout (vs. non-dropout)												
Dropout												
Child Personal Characteristics												
Risk of occasional marijuana use (great risk)												
Moderate risk												
Slight/no risk												
Missing <sup>5</sup>												
Child delinquency in past year												
Behavioral problem in past six months (vs. no problem)												
Problem												
Missing <sup>5</sup>												
Missing <sup>6,7</sup>												
Emotional problem in past six months (vs. no problem)												
Problem												
Missing <sup>5,7</sup>												
Missing <sup>6,7</sup>												

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios. AOR=Adjusted odds ratios.<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.<sup>4</sup> Frequency of use is not available for the 1979 and 1982 surveys.<sup>5</sup> Respondents were asked but did not report.<sup>6</sup> Not ascertained for children aged 18-25.<sup>7</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p&lt;.05; \*\*p&lt;.01; \*\*\*p&lt;.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.9. Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Last Year Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.96	.71 **	(.55-.91)	1,544	.90	.75	(.46-1.23)	845	.84	.68	(.42-1.10)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.85	.83	(.63-1.11)	1,515	.94	.92	(.56-1.49)	1,013	.94	.76	(.39-1.46)
Hispanic	2,996	.84	1.18	(.86-1.63)	1,574	1.12	1.49	(.89-2.49)	1,065	.95	.94	(.48-1.86)
Other	144	.71	1.02	(.48-2.17)	101	.59	.78	(.32-1.94)	20	.43	1.16	(.36-3.79)
Parent birth cohorts (vs. before 1945)	2,119				983				222			
Cohort 2 (1946-1948)	1,066	.66 *	.92	(.64-1.31)	579	1.29	1.34	(.71-2.54)	283	.91	.94	(.47-1.85)
Cohort 3 (1949-1953)	1,951	.59 ***	.91	(.63-1.30)	1,097	.98	.95	(.56-1.59)	613	1.05	1.19	(.59-2.39)
Cohort 4 (1954-1956)	1,235	.32 ***	.63 *	(.40-.99)	723	.38 ***	.42	(.18-1.00)	401	.73	1.03	(.49-2.15)
Cohort 5 (1957-1959)	1,379	.46 ***	1.04	(.65-1.66)	924	.77	1.26	(.50-3.17)	399	.76	1.04	(.46-2.34)
Cohort 6 (1960-1962)	1,165	.36 ***	1.03	(.62-1.72)	528	.47 *	.83	(.28-2.42)	625	.62	1.57	(.72-3.41)
Cohort 7 (1963-1964)	366	.23 ***	.78	(.36-1.69)	87	.06 ***	.09 *	(.01-.86)	279	.40 *	1.29	(.49-3.45)
Cohort 8 (after 1965)	182	.30 **	2.60 *	(1.04-6.49)	36	.10 *	.29	(.03-2.43)	146	.50	3.66 *	(1.36-9.74)
Parent education (vs. < high school)	3,128				1,587				999			
High school graduate	3,283	1.40 **	1.50 **	(1.14-1.98)	1,707	1.43	1.22	(.72-2.05)	1,031	1.31	1.55	(.95-2.51)
Some college	1,793	1.39 *	1.53 **	(1.13-2.09)	935	1.38	1.18	(.66-2.11)	582	1.33	1.51	(.79-2.90)
College graduate	1,258	1.31	1.51 *	(1.04-2.20)	728	1.18	1.48	(.72-3.01)	356	1.36	2.10	(.98-4.48)
Parent marital status (vs. married)	6,600				3,444				1,987			
Widowed	313	2.45 ***	1.95 **	(1.26-3.01)	129	.64	.37	(.10-1.29)	78	1.54	1.42	(.51-3.95)
Divorced/separated	1,759	1.43 **	1.31 *	(1.00-1.71)	968	2.01 ***	1.38	(.79-2.42)	598	1.25	1.09	(.65-1.81)
Never married	791	.81	.91	(.58-1.44)	416	.80	1.11	(.53-2.33)	305	.83	.88	(.40-1.96)
Region of country (vs. West)	2,115				1,199				613			
South	3,945	.61 ***	.63 **	(.45-.89)	2,009	.59 *	.56	(.28-1.11)	1,375	.73	.79	(.43-1.46)
North Central	1,834	.78	.79	(.55-1.13)	918	.74	.65	(.31-1.34)	558	.77	.66	(.35-1.26)
Northeast	1,569	.93	.79	(.57-1.09)	831	.68	.63	(.32-1.27)	422	1.01	.71	(.39-1.28)
Household income (vs. <\$8,999)					657				364			
\$9,000-19,999					1,157	1.10	1.23	(.59-2.56)	751	1.00	.95	(.44-2.06)
\$20,000-39,999					1,579	1.67	1.61	(.80-3.24)	947	.85	.70	(.31-1.58)
\$40,000-74,999					1,206	1.39	1.13	(.48-2.63)	698	1.28	.90	(.39-2.09)
\$75,000+					358	1.53	.78	(.27-2.22)	208	1.18	.84	(.33-2.14)
Population density (vs. MSA with 1 million+)					586				1,276			
MSA with <1 million					831	1.06	.96	(.57-1.61)	977	.88	.91	(.64-1.29)
Not in MSA					3,540	.81	.80	(.40-1.59)	715	.77	.85	(.54-1.32)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>5</sup> Respondents were asked but did not report.

<sup>6</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.9 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Last Year Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Past Year Frequency</b>												
Marijuana use in past year (vs. never)	6,379				3,210				1,952			
Former, not past year	2,512	1.61 ***	2.37 ***	(1.79-3.13)	1,449	2.24 ***	1.91 *	(1.16-3.14)	851	1.77 ***	1.59 *	(1.04-2.41)
1-200 days	439	1.69 *	2.66 ***	(1.53-4.65)	267	2.86 ***	1.74	(.62-4.92)	139	1.84	1.34	(.56-3.16)
200+ days	61	2.06	3.06 *	(1.25-7.51)	31	1.72	3.10	(.38-25.13)	26	4.42 **	4.03 *	(1.08-14.97)
Missing <sup>4</sup>	72	3.98 ***	2.95 *	(1.19-7.33)								
<b>Cigarette use in past month (vs. never)</b>												
Former, not past month	2,517				1,435				804			
<15 cigarettes/day	3,599	2.28 ***	1.76 ***	(1.29-2.41)	1,898	3.23 ***	2.64 **	(1.43-4.87)	1,055	2.41 ***	2.44 ***	(1.47-4.04)
16-35 cigarettes/day	1,735	2.39 ***	1.70 **	(1.16-2.50)	823	2.94 ***	2.39 *	(1.16-4.94)	653	2.53 ***	2.32 **	(1.41-3.82)
>35 cigarettes/day	1,274	3.66 ***	2.11 ***	(1.48-3.00)	634	5.51 ***	3.73 ***	(1.82-7.64)	363	2.78 ***	2.87 **	(1.48-5.58)
Missing <sup>5</sup>	230	3.21 ***	1.63	(.79-3.37)	98	6.83 ***	3.83	(.77-19.03)	62	.81	.57	(.11-2.88)
<b>Alcohol use in past month (vs. never)</b>												
Former, not past month	108	1.26	1.15	(.46-2.86)	69	2.80	1.55	(.25-9.60)	31	.20	.19	(.03-1.14)
<2 drinks/day	1,364				694				520			
2+drinks/day	3,356	2.32 ***	1.60	(.95-2.68)	1,817	2.11	.94	(.43-2.03)	998	2.10 *	1.19	(.59-2.39)
Missing <sup>4</sup>	3,293	2.82 ***	1.93 *	(1.14-3.28)	2,015	2.96 **	1.19	(.53-2.68)	1,096	2.95 ***	1.72	(.83-3.55)
<b>Cocaine (vs. never)</b>												
Former	370	4.08 ***	2.04	(.99-4.23)	232	4.78 **	1.13	(.37-3.44)	116	3.67 **	2.66	(.98-7.22)
Last year	611	7.56 ***	3.93 ***	(2.16-7.15)	199	2.06	.79	(.29-2.17)	238	4.05 ***	2.61 *	(1.23-5.53)
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (vs. great)	469	3.11 ***	2.57 ***	(1.49-4.45)	4,412				2,658			
Moderate risk	8,535				427	2.20 **	2.23 *	(1.05-4.73)	254	1.39	1.35	(.77-2.36)
Slight/no risk	722	1.39 *	1.37	(.91-2.08)	118	3.42 **	3.67	(.89-15.10)	56	2.57 *	3.29	(.93-11.64)
Missing <sup>5</sup>	206	2.33 **	1.93	(.87-4.30)								
<b>Delinquency</b>												
Major depressive episode in last year (vs. Major depressive episode					2,405				2,695			
General anxiety disorder in last year (vs. not)					1,327	1.14	1.04	(.68-1.60)	273	1.49	1.21	(.67-2.18)
General anxiety disorder					1,160	1.32	.68	(.40-1.15)	2,888			
<b>Child Sociodemographics</b>					99	.35	.02 **	(.00-.30)	80	1.19	.87	(.35-2.12)
Child sex (vs. female)						1.25	.89	(.58-1.36)	1,498	1.34 *	2.01 ***	(1.48-2.72)
Child age at survey (vs. age 15)					2,512	1.73 **	1.03	(.66-1.59)	377			
12	4,807	1.36 **	1.44 ***	(1.16-1.77)	642				511	.09 ***	.07 ***	(.03-.17)
13	1,262	.07 ***	.05 ***	(.02-.11)	891	.10 ***	.12 **	(.03-.46)	489	.14 ***	.12 ***	(.04-.31)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.<sup>4</sup> Frequency of use is not available for the 1979 and 1982 surveys.<sup>5</sup> Respondents were asked but did not report.<sup>6</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.<sup>7</sup> Not ascertained for children aged 18-25.<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.<sup>9</sup> p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.9 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Last Year Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)					PANEL B 1991-1994A (N=4,872) <sup>3</sup>					PANEL C 1994B-1996 (N=2,968)				
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI			
14	1,470	.49 ***	.43 ***	(.28-.66)	742	.40 **	.45 *	(.20-1.00)	451	.42 *	.33 *	(.14-.79)			
16	1,273	1.65 ***	1.80 ***	(1.30-2.50)	646	1.65	1.32	(.64-2.72)	376	1.50	1.50	(.82-2.73)			
17	1,063	1.90 ***	2.27 ***	(1.57-3.30)	538	1.74	1.72	(.83-3.57)	320	2.03 *	2.06	(.94-4.52)			
18	248	1.12	1.48	(.79-2.78)	138	1.91	1.31	(.44-3.91)	109	1.21	2.13	(.82-5.48)			
19	189	2.21 **	3.57 ***	(1.97-6.48)	102	3.10 **	3.52 *	(1.17-10.54)	87	3.11 **	5.61 ***	(2.36-13.35)			
20	155	2.96 ***	5.78 ***	(3.14-10.67)	92	5.22 ***	7.29 ***	(2.25-23.55)	63	3.03 *	6.14 **	(1.96-19.23)			
21	120	2.27 *	4.93 ***	(2.10-11.60)	71	4.70 **	7.33 **	(1.99-27.03)	49	1.40	2.52	(.62-10.27)			
22	113	1.49	1.84	(.69-4.91)	71	2.16	1.82	(.44-7.51)	42	2.47	4.22	(1.00-17.80)			
23	99	.98	.69	(.26-1.84)	63	1.66	.75	(.09-6.00)	36	1.08	2.00	(.45-8.94)			
24	73	2.76 *	2.38	(.76-7.48)	43	3.94 *	6.20	(.99-38.66)	30	3.81	8.68 **	(1.51-50.03)			
25	74	1.28	1.28	(.48-3.44)	46	1.33	2.65	(.25-27.87)	28	2.59	6.22 **	(1.25-31.04)			
Child birth cohort (vs. 1962-1964) <sup>6</sup>							(vs. 1965-1969)				(vs. 1965-1974)				
Cohort 2 (1965-1969)	833	.36 ***	.90	(.56-1.43)	189										
Cohort 3 (1970-1974)	1,452	.41 ***	.37 ***	(.21-.64)	895	1.02	1.10	(.31-3.88)	221						
Cohort 4 (1975-1979)	4,518	.21 ***	.37 ***	(.21-.65)	3,228	.34 **	1.25	(.29-5.41)	1,072	.68	.93	(.32-2.69)			
Cohort 5 (1980-1984)	2,320	.08 ***	.45 *	(.23-.88)	645	.09 ***	2.38	(.31-18.31)	1,675	.15 ***	.77	(.23-2.58)			
High school dropout (vs. non-dropout)	8,909				4,665				2,741						
Dropout	554	2.86 **	2.19 **	(1.35-3.55)	292	5.09 ***	3.29 **	(1.43-7.55)	227	2.01 **	1.59	(.79-3.18)			
Child Personal Characteristics															
Risk of occasional marijuana use (vs. great risk)															
Moderate risk					2,568		4.42 ***	(2.38-8.19)							
Slight/no risk					1,428	4.67 ***									
Missing <sup>5</sup>					905	20.07 ***	11.88 ***	(7.14-19.74)							
Child delinquency in past year					56	9.09 ***	22.11 **	(3.36-145.6)							
Behavioral problem in past six months									1,975						
(vs. no problem)															
Problem										4.48 ***	4.24 ***	(2.71-6.61)			
Missing <sup>5</sup>										1.40	2.65	(.83-8.50)			
Missing <sup>7,a</sup>										4.36 ***	1.00	(1.00-1.00)			
Emotional problem in past six month															
(vs. no problem)															
Problem										2.41 ***	1.48	(.86-2.53)			
Missing <sup>5,a</sup>										1.05	1.00	(1.00-1.00)			
Missing <sup>7,a</sup>										3.26 ***	1.00	(1.00-1.00)			

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>5</sup> Respondents were asked but did not report.

<sup>6</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.10. Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Last Month Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)					PANEL B 1991-1994A (N=4,872) <sup>3</sup>					PANEL C 1994B-1996 (N=2,968)				
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI			
<b>Parent Sociodemographics</b>															
Parent sex (vs. female)	2,922	.97	.71 **	( .57- .89)	1,544	.94	.74	( .49-1.12)	845	.73	.54 **	( .35- .84)			
Parent ethnicity (vs. white)	3,509				1,767				870						
African-American	2,814	.84	.70 **	( .53- .91)	1,515	.96	.79	( .51-1.20)	1,013	.89	.57 *	( .32- .99)			
Hispanic	2,996	.88	1.00	( .75-1.33)	1,574	1.16	1.21	( .75-1.97)	1,065	.98	.77	( .44-1.34)			
Other	144	.68	.94	( .47-1.90)	101	.59	.76	( .32-1.82)	20	.30 *	.88	( .32-2.38)			
<b>Parent birth cohorts (vs. before 1945)</b>															
Cohort 2 (1946-1948)	2,119				983				222						
Cohort 3 (1949-1953)	1,066	.67 **	.99	( .72-1.35)	579	.94	1.13	( .66-1.92)	283	.81	.97	( .54-1.79)			
Cohort 4 (1954-1956)	1,951	.55 ***	.95	( .68-1.32)	1,097	.71	.96	( .59-1.56)	613	.81	1.11	( .57-2.15)			
Cohort 5 (1957-1959)	1,235	.29 ***	.64 *	( .44- .94)	723	.29 ***	.49 *	( .26- .92)	401	.53 *	.92	( .46-1.82)			
Cohort 6 (1960-1962)	1,379	.41 ***	1.07	( .71-1.65)	924	.53 **	1.37	( .67-2.78)	399	.54 *	.87	( .40-1.90)			
Cohort 7 (1963-1964)	1,165	.27 ***	.95	( .60-1.51)	528	.30 ***	.81	( .32-2.08)	625	.39 ***	1.18	( .57-2.48)			
Cohort 8 (after 1965)	366	.25 ***	1.06	( .56-2.00)	87	.03 ***	.08 *	( .01- .78)	279	.39 **	1.58	( .62-4.02)			
Cohort 8 (after 1965)	182	.23 ***	2.88 *	(1.19-6.98)	36	.05 **	.26	( .04-1.80)	146	.34 **	3.44 *	(1.35-8.78)			
<b>Parent education (vs. &lt; high school)</b>															
High school graduate	3,128				1,587				999						
Some college	3,283	1.21	1.29	(1.00-1.66)	1,707	1.06	1.00	( .63-1.61)	1,031	1.19	1.32	( .85-2.05)			
College graduate	1,793	1.16	1.30	(.95-1.77)	935	1.05	1.04	( .64-1.70)	582	1.03	1.08	( .63-1.86)			
Parent marital status (vs. married)	1,258	1.01	1.17	(.83-1.67)	728	.85	1.13	( .59-2.16)	356	.92	1.23	( .64-2.33)			
Widowed	6,600				3,444				1,987						
Divorced/separated	313	2.82 ***	2.19 ***	(1.42-3.36)	129	1.51	.78	(.34-1.79)	78	2.65 *	2.14	(.81-5.70)			
Never married	1,759	1.35 **	1.17	(.90-1.52)	968	1.57 *	.90	(.55-1.47)	598	1.45 *	1.29	(.81-2.06)			
Region of country (vs. West)	791	.86	1.03	(.69-1.55)	416	.79	.94	(.48-1.86)	305	.93	1.21	(.63-2.32)			
South	2,115				1,199				613						
North Central	3,945	.63 ***	.59 ***	(.43- .80)	2,009	.69	.63	(.34-1.18)	1,375	.64 *	.63	(.36-1.08)			
Northeast	1,834	.77	.73	(.53-1.01)	918	.74	.60	(.29-1.23)	558	.82	.65	(.37-1.14)			
Household income (vs. <\$8,999)	1,569	.95	.76	(.56-1.03)	831	.89	.80	(.42-1.50)	422	.93	.57 *	(.35- .95)			
\$9,000-19,999					657				364						
\$20,000-39,999					1,157	1.06	.99	(.55-1.80)	751	1.20	1.33	(.65-2.69)			
\$40,000-74,999					1,579	1.48	.34	(.76-2.34)	947	1.06	1.00	(.45-2.22)			
\$75,000+					1,206	1.28	.87	(.46-1.64)	698	1.54	1.42	(.60-3.33)			
Population density (vs. MSA with 1 million+)					358	1.64	.91	(.40-2.09)	208	1.22	1.27	(.51-3.17)			
MSA with <1 million					586				1,276						
Not in MSA					831	.87	.73	(.47-1.12)	977	.97	1.05	(.75-1.38)			
					3,540	.84	.99	(.58-1.70)	715	.81	.90	(.60-1.36)			

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel C, 1994B-1996, estimate not calculated because of zero cells.

<sup>6</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.10 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Last Month Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Past Month Frequency</b>												
Marijuana use in past month (vs. never)	6,379	1.60 ***	2.64 ***	(2.01-3.45)	3,210	1.92 ***	2.24 **	(1.38-3.64)	1,952	1.64 **	1.61 *	(1.08-2.40)
Former	2,789				1,597				934			(.62-3.87)
1-20 days	217	1.77 *	2.35 *	(1.18-4.68)	104	3.04 **	1.55	(.45-5.30)	68	1.15	1.54	(.27-17.17)
21-30 days	36	3.12 *	3.36 *	(1.13-9.94)	20	1.76	1.60	(.32-8.03)	7	3.15	2.16	
Missing <sup>4,5</sup>	42	.92	1.33	(.34-5.11)	26	1.17	1.43	(.36-5.76)	7			
<b>Cigarette use in past month (vs. never)</b>												
Former, not past month	2,517				1,435				804			
<15 cigarettes/day	3,599	2.28 ***	1.36 *	(1.01-1.82)	1,898	1.73 **	1.21	(.75-1.93)	1,055	1.91 **	1.97 *	(1.17-3.31)
16-35 cigarettes/day	1,735	2.39 ***	1.39	(.98-1.97)	823	1.74 *	12.50	(.68-2.30)	653	2.08 ***	2.02 **	(1.27-3.22)
>35 cigarettes/day	1,274	3.66 ***	1.66 **	(1.19-2.34)	634	2.82 ***	1.68	(.94-3.01)	363	2.26 **	2.65 **	(1.37-5.13)
Missing <sup>4</sup>	230	3.21 ***	1.93 *	(1.14-3.28)	98	3.32 **	1.62	(.54-4.90)	62	1.37	1.06	(.34-3.33)
<b>Alcohol use in past month (vs. never)</b>												
Former, not past month	1,364	1.26	1.29	(.49-3.40)	69	2.51	1.54	(.38-6.17)	31	.15 **	.13 *	(.02-.73)
<2 drinks/day	3,356	2.32 ***	1.87 **	(1.23-2.83)	1,817	2.44 **	1.88 *	(1.04-3.41)	520	2.05 *	1.37	(.69-2.70)
2+drinks/day	3,293	2.54 ***	2.60 ***	(1.40-3.32)	2,015	2.92 ***	1.97 *	(1.03-3.78)	998	2.56 ***	1.86	(.97-3.57)
Missing <sup>6</sup>	370	3.50 ***	1.93 *	(1.01-3.68)	232	4.69 ***	2.12	(.80-5.60)	116	2.64 *	2.00	(.76-5.25)
Missing <sup>4</sup>	611	6.21	4.11 ***	(2.48-6.80)	199	1.65	1.03	(.40-2.69)	238	3.18 **	2.43 *	(1.21-4.75)
<b>Cocaine (vs. never)</b>												
Former	469	2.37	2.38 ***	(1.46-3.87)	4,412				2,658			
Last year	8,535				427	1.81 **	2.02	(.99-4.12)	254	1.58 *	2.00 **	(1.22-3.27)
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (great risk)	722	1.45 ***	1.70 **	(1.17-2.46)	118	2.73 *	4.03 *	(1.01-16.01)	56	2.19	4.76 **	(1.54-14.75)
Moderate risk	206	1.97 ***	2.08	(.89-4.84)								
Slight/no risk												
Missing <sup>4</sup>												
<b>Delinquency in past year</b>												
Major depressive episode in past year (vs. not)	2,405				2,405	1.01	1.02	(.69-1.49)				
Major depressive episode	1,327				1,327	1.48 *	1.12	(.70-1.78)				
General anxiety disorder in past year (vs. not)	1,160				1,160	1.13	.13	(.01-2.26)				
General anxiety disorder	99				99	1.14	.90	(.60-1.36)				
<b>Child Sociodemographics</b>												
Child sex (vs. female)	4,807	1.21 *	1.28 *	(1.04-1.58)	2,512	1.40 *	.92	(.62-1.35)	2,695		.89	(.50-1.58)
Child age at survey (vs. age 15)	1,262				642				273			
12	1,703	0.05 ***	.04 ***	(.02-.08)	891	.08 ***	.08 ***	(.02-.29)	2,888	1.91	1.71	(.79-3.69)
									80			
									1,498	1.11	1.64 ***	(1.27-2.12)
									377	.07 ***	.05 ***	(.02-.11)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.  
<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.  
<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.  
<sup>4</sup> Respondents were asked but did not report.  
<sup>5</sup> For Panel C, 1994B-1996, estimate not calculated because of zero cells.  
<sup>6</sup> Frequency of use is not available for the 1979 and 1982 surveys.  
<sup>7</sup> Not ascertained for children aged 18-25.  
<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.  
<sup>9</sup> \*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.  
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.10 (cont'd). Logistic Regressions Predicting Child Lifetime Marijuana Use from Parent Last Month Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>a</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
13	1,621	0.22 ***	.18 ***	(.11-.30)	872	.21 ***	.20 ***	(.08-.52)	489	.12 ***	.09 ***	(.04-.24)
14	1,470	0.44 ***	.39 ***	(.26-.56)	742	.35 ***	.38 **	(.19-.75)	451	.38 **	.28 **	(.12-.63)
16	1,273	1.55 **	1.66 **	(1.21-2.28)	646	1.56	1.16	(.63-2.11)	376	1.41	1.31	(.72-2.38)
17	1,063	1.96 ***	2.25 ***	(1.60-3.17)	538	2.18 **	2.04	(.98-4.26)	320	1.89 *	1.65	(.71-3.33)
18	248	1.18	1.50	(.87-2.58)	138	1.73	.87	(.33-2.31)	109	1.75	3.04 **	(1.39-6.67)
19	189	3.48 ***	5.46 ***	(3.03-9.83)	102	6.69 ***	5.54 **	(1.75-17.52)	87	3.43 ***	5.40 ***	(2.47-11.79)
20	155	3.47 ***	6.49 ***	(3.47-12.12)	92	6.50 ***	6.25 **	(1.94-20.20)	63	3.42 **	5.34 **	(1.76-16.19)
21	120	4.12 ***	8.44 ***	(4.22-16.87)	71	6.45 ***	6.04 ***	(2.02-17.99)	49	5.68 ***	6.29 **	(2.00-19.75)
22	113	1.76	1.90	(.80-4.80)	71	2.37	1.07	(.28-4.14)	42	3.79 **	3.70	(.94-14.55)
23	99	4.55 ***	4.07 ***	(1.78-9.33)	63	9.34 ***	5.42 *	(1.29-22.80)	36	3.43 *	3.68	(.79-17.10)
24	73	5.72 ***	5.63 ***	(2.69-11.79)	43	9.42 ***	7.68 **	(1.70-34.56)	30	6.99 ***	9.01 **	(2.20-36.93)
25	74	4.94 ***	5.11 ***	(2.43-10.77)	46	8.81 ***	12.99 **	(2.19-76.92)	28	5.27 **	6.78 *	(1.58-29.10)
Child birth cohort (vs. 1962-1964)	340					(vs. 1965-1969)				(vs. 1965-1969)		
Cohort 2 (1965-1969)	833	.38 ***	.84	(.55-1.29)	189				15			
Cohort 3 (1970-1974)	1,452	.51 ***	.37 ***	(.23-.58)	895	.46 *	.68	(.27-1.72)	206	1.14	1.41	(.38-5.24)
Cohort 4 (1975-1979)	4,518	.18 ***	.29 ***	(.19-.45)	3,228	.11 ***	.42	(.13-1.40)	1,072	.36	.75	(.17-3.22)
Cohort 5 (1980-1984)	2,320	.06 ***	.33 ***	(.19-.57)	645	.02 ***	.69	(.13-3.69)	1,675	.07 ***	.56	(.12-2.71)
High school dropout (vs. non-dropout)	8,909				4,665				2,741			
Dropout	554	3.20 ***	2.17 ***	(1.45-3.26)	292	5.07 ***	2.62 **	(1.40-4.90)	227	2.24 ***	1.49	(.77-2.89)
Child Personal Characteristics												
Risk of occasional marijuana use (great risk)												
Moderate risk					2,568							
Slight/no risk					1,428							
Missing <sup>4</sup>					905	3.31 ***	2.98 ***	(1.98-4.50)				
Child delinquency in past year					56	13.44 ***	8.82 ***	(6.03-12.89)				
Behavioral problem in past six months						4.46 *	11.82 **	(1.93-72.37)				
(vs. no problem)						1.55 ***	1.54 ***	(1.39-1.71)	1,975			
Problem												
Missing <sup>4</sup>					476	4.69 ***	4.10 ***	(2.73-6.15)		4.69 ***	4.10 ***	(2.73-6.15)
Missing <sup>7,a</sup>					73	1.54	2.79	(.89-8.73)		1.54	2.79	(.89-8.73)
Emotional problem in past six months					444	7.58 ***	1.00	(1.00-1.00)		7.58 ***	1.00	(1.00-1.00)
(vs. no problem)					2,098							
Problem												
Missing <sup>4,b</sup>					353	2.82 ***	1.69 *	(1.00-2.87)		2.82 ***	1.69 *	(1.00-2.87)
Missing <sup>7,a</sup>					73	1.18	1.00	(1.00-1.00)		1.18	1.00	(1.00-1.00)
					444	5.83 ***	1.00	(1.00-1.00)		5.83 ***	1.00	(1.00-1.00)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios. AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel C, 1994B-1996, estimate not calculated because of zero cells.

<sup>6</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>7</sup> Not ascertained for children aged 18-25.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ , T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.11. Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Last Month Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Sociodemographics</b>												
Parent sex (vs. female)	2,922	.96	.71 **	( .55- .91)	1,544	.90	.74	( .45-1.21)	845	.84	.67	( .41-1.09)
Parent ethnicity (vs. white)	3,509				1,767				870			
African-American	2,814	.85	.83	( .63-1.11)	1,515	.94	.95	( .59-1.53)	1,013	.94	.75	( .39-1.47)
Hispanic	2,996	.84	1.18	( .86-1.62)	1,574	1.12	1.50	( .90-2.50)	1,065	.95	.96	( .49-1.89)
Other	144	.71	1.02	( .48-2.17)	101	.59	.80	( .32-1.97)	20	.43	1.14	( .35-3.75)
<b>Parent birth cohorts (vs. before 1945)</b>												
Cohort 2 (1946-1948)	2,119	.66 *	.92	( .64-1.31)	983	1.29	1.36	( .72-2.57)	283	.91	.93	( .47-1.84)
Cohort 3 (1949-1953)	1,066	.59 ***	.91	( .64-1.30)	579	.98	.96	( .57-1.62)	613	1.05	1.19	( .59-2.39)
Cohort 4 (1954-1956)	1,951	.32 ***	.63 *	( .39-1.00)	1,097	.38 ***	.42	( .18-1.01)	401	.73	1.01	( .48-2.13)
Cohort 5 (1957-1959)	1,235	.46 ***	1.04	( .65-1.66)	723	.77	1.27	( .51-3.20)	399	.76	1.02	( .44-2.34)
Cohort 6 (1960-1962)	1,379	.36 ***	1.04	( .63-1.74)	924	.47 *	.82	( .28-2.41)	625	.62	1.59	( .74-3.42)
Cohort 7 (1963-1964)	1,165	.23 ***	.77	( .35-1.66)	528	.06 ***	.08	( .01-1.01)	625	.40 *	1.29	( .48-3.44)
Cohort 8 (after 1965)	366	.30 **	2.60 *	( 1.05-6.45)	87	.10 *	.30	( .03-2.82)	279	.50	3.60 *	( 1.37-9.43)
<b>Parent education (vs. &lt; high school)</b>												
High school graduate	3,128	1.40 **	1.50 **	( 1.14-1.97)	1,587	1.43	1.18	( .70-1.98)	999	1.31	1.57	( .96-2.55)
Some college	3,283	1.39 *	1.53 **	( 1.12-2.09)	1,707	1.38	1.15	( .64-2.08)	1,031	1.33	1.55	( .82-2.93)
College graduate	1,793	1.31	1.52 *	( 1.05-2.21)	935	1.18	1.44	( .70-2.99)	582	1.36	2.13 *	( 1.01-4.47)
<b>Parent marital status (vs. married)</b>												
Widowed	1,258	2.45 ***	1.93 **	( 1.25-2.99)	728	.64	.36	( .10-1.26)	356	1.54	1.39	( .49-3.91)
Divorced/separated	6,600	1.43 **	1.31	( 1.00-1.71)	3,444	2.01 ***	1.34	( .76-2.37)	1,987	1.25	1.07	( .65-1.76)
Never married	313	.81	.93	( .60-1.46)	129	.80	1.06	( .50-2.24)	78	.83	.89	( .40-1.97)
<b>Region of country (vs. West)</b>												
South	2,115	.61 ***	.63 **	( .45- .89)	1,199	.59 *	.56	( .28-1.12)	613	.73	.79	( .42-1.47)
North Central	3,945	.78	.79	( .55-1.13)	2,009	.74	.65	( .31-1.35)	1,375	.77	.66	( .34-1.26)
Northeast	1,834	.93	.79	( .57-1.09)	918	.68	.63	( .31-1.26)	558	1.01	.71	( .39-1.29)
<b>Household income (vs. &lt;\$8,999)</b>												
\$9,000-19,999	1,569				657	1.10	1.14	( .58-2.25)	364	1.00	.96	( .45-2.07)
\$20,000-39,999					1,157	1.67	1.48	( .77-2.84)	751	.85	.70	( .31-1.57)
\$40,000-74,999					1,579	1.39	1.04	( .46-2.34)	947	1.28	.90	( .39-2.09)
\$75,000+					1,206	1.53	.72	( .26-1.99)	698	1.18	.83	( .33-2.13)
<b>Population density (vs. MSA with 1 million+)</b>												
MSA with <1 million					586	1.06	.97	( .57-1.63)	1,276	.88	.90	( .63-1.28)
Not in MSA					3,540	.81	.82	( .41-1.63)	7151	.77	.85	( .55-1.34)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel C, 1994B-1996, estimate not calculated because of zero cells.

<sup>6</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>7</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>8</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

<sup>9</sup> \*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.11 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Last Month Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
<b>Parent Past Month Frequency</b>												
Marijuana use in past month (vs. never)	6,379				3,210				1,952			
Former, not in past month	2,789	1.67 ***	2.42 ***	(1.85-3.17)	1,597	2.27 ***	1.95 **	(1.19-3.20)	934	1.82 ***	1.57 *	(1.03-2.35)
1-20 days	217	2.21 **	2.70 **	(1.35-5.40)	104	3.79 ***	1.52	(.33-6.91)	68	1.69	2.18	(.88-5.39)
21-30 days	61	4.62 **	4.76 **	(1.64-13.78)	20	3.10	2.98	(.38-23.29)	7	4.63	4.19	(.78-22.45)
Missing <sup>4,5</sup>	72	.58	.74	(.13-4.34)	26	.31	.05	(.00-1.22)	7			
<b>Cigarette use in past month (vs. never)</b>	2,517				1,435				804			
Former, not in past month	3,599	2.28 ***	1.76 ***	(1.29-2.39)	1,898	3.23 ***	2.68 **	(1.45-4.94)	1,055	2.41 ***	2.46 ***	(1.48-4.07)
<15 cigarettes/day	1,735	2.39 ***	1.70 **	(1.16-2.48)	823	2.94 ***	2.35 *	(1.13-4.86)	653	2.53 ***	2.32 **	(1.42-3.81)
16-35 cigarettes/day	1,274	3.66 ***	2.09 ***	(1.47-2.98)	634	5.51 ***	3.69 ***	(1.79-7.58)	363	2.78 ***	2.83 **	(1.44-5.54)
>35 cigarettes/day	230	3.21 ***	1.66	(.80-3.44)	98	6.83 ***	3.77	(.75-18.84)	62	.81	.69	(.14-3.39)
Missing <sup>4</sup>	108	1.26	1.14	(.46-2.84)	69	2.80	1.50	(.24-9.50)	31	.15 **	.20	(.03-1.17)
<b>Alcohol use in past month (vs. never)</b>	1,364				694				520			
Former, not in past month	3,356	2.32 ***	1.59	(.95-2.670)	1,817	2.11	.95	(.44-2.05)	998	2.10 *	1.19	(.59-2.41)
<2 drinks/day	3,293	2.82 ***	1.93 *	(1.14-3.28)	2,015	2.96 **	1.20	(.54-2.69)	1,096	2.95 ***	1.71	(.82-3.58)
2+drinks/day	370	4.08 ***	2.01	(.97-4.17)	232	4.78 **	1.14	(.37-3.50)	116	3.67 **	2.60	(.95-7.12)
Missing <sup>6</sup>	611	7.56 ***	3.98 ***	(2.22-7.16)								
Missing <sup>4</sup>	469	3.11 ***	2.61 ***	(1.52-4.48)	199	2.06	.80	(.29-2.19)	238	4.05 ***	2.69 **	(1.30-5.55)
<b>Cocaine (vs. never)</b>	8,535				4,412				2,658			
Former	722	1.39 *	1.38	(.92-2.07)	427	2.20 **	2.23 *	(1.07-4.66)	254	1.39	1.40	(.80-2.45)
Last year	206	2.33 **	2.02	(.89-4.62)	118	3.42 **	4.54 *	(1.21-17.03)	56	2.57 *	3.01	(.94-9.59)
<b>Parent Personal Characteristics</b>												
Risk of occasional marijuana use (vs. great)					2,405							
Moderate risk					1,327	1.14	1.02	(.67-1.55)				
Slight/no risk					1,160	1.32	.67	(.40-1.10)				
Missing <sup>4</sup>					99	.35	.02 **	(.00-.29)				
Delinquency					125		.91	(.60-1.37)				
<b>Major depressive episode in last year (vs. Major depressive episode)</b>									2,695			
General anxiety disorder in last year (vs. not)									273	1.49	1.21	(.67-2.21)
General anxiety disorder									2,888			
<b>Child Sociodemographics</b>									80	1.19	.95	(.40-2.22)
Child sex (vs. female)	4,807	1.36 **	1.44 ***	(1.16-1.77)	2,512	1.73 **	1.02	(.66-1.57)	1,498	1.34 *	1.99 ***	(1.47-2.71)
Child age at survey (vs. age 15)	1,262				642				377			
12	1,703	.07 ***	.05 ***	(.03-.11)	891	.10 ***	.12 **	(.03-.46)	511	.09 ***	.06 ***	(.03-.16)
13	1,621	.26 ***	.22 ***	(.13-.39)	872	.23 **	.22 *	(.07-.70)	489	.14 ***	.12 ***	(.04-.32)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel C, 1994B-1996, estimate not calculated because of zero cells.

<sup>6</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>7</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>8</sup> Not ascertained for children aged 18-25.

<sup>9</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.



Table A.6.11 (cont'd). Logistic Regressions Predicting Child Last Year Marijuana Use from Parent Last Month Frequency of Marijuana Use, Use of Three Other Substances, and Parent and Child Sociodemographic and Personal Characteristics<sup>1,2</sup> (NHSDA 1979-1996 Parent-Child Dyads)

Predictors	PANEL A 1979-1996 (N=9,463)				PANEL B 1991-1994A (N=4,872) <sup>3</sup>				PANEL C 1994B-1996 (N=2,968)			
	N	OR	AOR	95% CI	N	OR	AOR	95% CI	N	OR	AOR	95% CI
14	1,470	.49 ***	.43 ***	(.28-.66)	742	.40 **	.45	(.20-1.01)	451	.42 *	.33 *	(.13-.79)
16	1,273	1.65 ***	1.80 ***	(1.30-2.51)	646	1.65	1.32	(.65-2.70)	376	1.50	1.54	(.84-2.83)
17	1,063	1.90 ***	2.28 ***	(1.57-3.31)	538	1.74	1.70	(.81-3.57)	320	2.03 *	2.06	(.94-4.54)
18	248	1.12	1.49	(.80-2.79)	138	1.91	1.29	(.43-3.89)	109	1.21	2.15	(.84-5.51)
19	189	2.21 **	3.59 ***	(1.97-6.52)	102	3.10 **	3.44 *	(1.14-10.34)	87	3.11 **	5.61 ***	(2.36-13.31)
20	155	2.96 ***	5.91 ***	(3.21-10.87)	92	5.22 ***	7.33 ***	(2.25-23.90)	63	3.03 *	6.13 **	(1.98-19.00)
21	120	2.27 *	5.07 ***	(2.17-11.82)	71	4.70 **	8.09 **	(2.32-28.18)	49	1.40	2.51	(.62-10.21)
22	113	1.49	1.84	(.69-4.93)	71	2.16	1.82	(.44-7.56)	42	2.47	4.17	(.99-17.67)
23	99	.98	.70	(.26-1.84)	63	1.66	.82	(.11-6.27)	36	1.08	2.00	(.45-8.82)
24	73	2.76 *	2.38	(.76-7.50)	43	3.94 *	6.44 *	(1.03-40.07)	30	3.81	8.69 *	(1.51-50.08)
25	74	1.28	1.28	(.48-3.44)	46	1.33	2.73	(.26-28.70)	28	2.59	6.23 *	(1.24-31.31)
Child birth cohort (vs. 1962-1964) <sup>7</sup>	340						(vs. 1965-1969)			(vs. 1965-1974)		
Cohort 2 (1965-1969)	833	.36 ***	.90	(.57-1.43)	189							
Cohort 3 (1970-1974)	1,452	.41 ***	.37 ***	(.21-.64)	895	1.02	1.13	(.32-3.93)	221			
Cohort 4 (1975-1979)	4,518	.21 ***	.37 ***	(.21-.65)	3,228	.34 **	1.28	(.30-5.46)	1,072	.68	.92	(.32-2.68)
Cohort 5 (1980-1984)	2,320	.08 ***	.45 *	(.22-.88)	645	.09 ***	2.44	(.32-18.58)	1,675	.15 ***	.76	(.23-2.57)
High school dropout (vs. non-dropout)	8,909				4,665				2,741			
Dropout	554	2.86 **	2.20 **	(1.36-3.56)	292	5.09 ***	3.38 **	(1.0-7.61)	227	2.01 **	1.60	(.80-3.20)
Child Personal Characteristics												
Risk of occasional marijuana use (vs. great)												
Moderate risk					2,568							
Slight/no risk					1,428	4.67 ***	4.46 ***	(2.43-8.21)				
Missing <sup>4</sup>					905	20.0 ***	12.1 ***	(7.39-20.01)				
Child delinquency in past year					56	9.09 ***	22.9 ***	(3.59-146.70)				
Behavioral problem in past six months (vs. Problem)						1.58 ***	1.58 ***	(1.41-1.77)				
Missing <sup>4</sup>									1,975			
Missing <sup>4,9</sup>									476	4.48 ***	4.31 ***	(2.78-6.68)
Emotional problem in past six month (vs. no Problem)									73	1.40	2.6	(.80-8.42)
Missing <sup>4,9</sup>									444	4.36 ***	1.00	(1.00-1.00)
Missing <sup>4,9</sup>									2,098			
									353	2.41 ***	1.42	(.84-2.40)
									73	1.05	1.00	(1.00-1.00)
									444	3.26 ***	1.00	(1.00-1.00)

<sup>1</sup> In 1979, 1982 and 1990, children aged 12-17 were selected. In all other years, children aged 12-25 were selected.

<sup>2</sup> Weighted estimates with SUDAAN PROC LOGISTIC, unweighted N's. OR=Unadjusted odds ratios, AOR=Adjusted odds ratios.

<sup>3</sup> Due to missing cases for parent and child delinquency in the past year, the overall multivariate N is slightly smaller than the univariate N's indicated.

<sup>4</sup> Respondents were asked but did not report.

<sup>5</sup> For Panel C, 1994B-1996, estimate not calculated because of zero cells.

<sup>6</sup> Frequency of use is not available for the 1979 and 1982 surveys.

<sup>7</sup> For Panel B, 1991-1994A, child birth cohort 2 is the reference group; for Panel C, 1994B-1996, because of zero cells child birth cohorts 2 and 3 were collapsed as the reference group.

<sup>8</sup> Not ascertained for children aged 18-25.

<sup>9</sup> Estimates not calculated in the multivariate model because the missing categories are perfectly collinear with other variable categories specified in the model.

\*p<.05; \*\*p<.01; \*\*\*p<.001, T-test.

Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

Table A.6.12. Pearson Correlations<sup>1</sup> of Parent and Child Marijuana Use and Attitudes, Parent Other Substance Use, and Child Delinquency and School Dropout (NHSDA 1991-1994A, N=4,957)

	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22
Mean	.43	1.36	.51	1.76	1.28	1.18	1.17	.55	1.86	1.30	.53	1.35	2.10	1.21	3.54	3.44	.28	1.05	.15	.75	15.26	.06
Standard Deviation	1.33	1.36	1.40	.87	.67	2.04	.96	1.05	.93	.64	.50	1.58	2.03	1.60	2.40	1.86	1.06	.44	.61	1.42	2.83	.24
<b>Variables in Structural Equation Model #2</b>																						
1 Child marijuana lifetime freq																						
2 Child marijuana past year freq	.83***																					
3 Child recency marijuana use	.86***	.86***																				
4 Child risk occasional marijuana use	.36***	.31***	.36***																			
5 Child risk regular marijuana use	.32***	.32***	.31***	.60***																		
6 Parent marijuana lifetime freq	.10***	.09***	.12***	.04**	.03																	
7 Parent marijuana past year freq	.06***	.04**	.04**	.02	.02	.39***																
8 Parent recency marijuana use	.10***	.09***	.10***	.02	.05***	.70***	.78***															
9 Parent risk occasional marijuana use	.04*	.02	.05***	.12***	.09***	.37***	.18***	.32***														
10 Parent risk regular marijuana use	.04*	.04**	.06***	.09***	.08***	.30***	.22***	.28***	.68***													
11 Parent smk 5 pks cig lifetime	.11***	.10***	.11***	.05***	.06***	.26***	.09***	.23***	.12***	.10***												
12 Parent qty cigs smoked daily	.11***	.11***	.10***	.05***	.06***	.25***	.06***	.19***	.10***	.07***	.81***											
13 Parent recency cig use	.11***	.11***	.11***	.04**	.06***	.24***	.11***	.24***	.11***	.12***	.71***	.62***										
14 Parent freq drunk past year	.10***	.11***	.11***	.08***	.08***	.26***	.25***	.32***	.16***	.15***	.20***	.18***	.27***									
15 Parent alcohol past year freq	.07***	.06***	.07***	.06***	.05***	.22***	.16***	.26***	.20***	.12***	.20***	.16***	.21***	.67***								
16 Parent recency alcohol use	.06***	.07***	.08***	.07***	.04**	.18***	.10***	.22***	.19***	.10***	.20***	.15***	.22***	.54***	.77***							
17 Parent cocaine lifetime freq	.05***	.06***	.10***	.01***	.00	.58***	.34***	.46***	.19***	.16***	.12***	.12***	.14***	.20***	.13***	.09***						
18 Parent cocaine past year freq	.03***	.02	.03***	.01	.00	.23***	.30***	.32***	.09***	.09***	.07***	.03***	.09***	.11***	.07***	.06***	.37***					
19 Parent recency cocaine use	.08***	.07***	.09***	.00	.01	.51***	.43***	.50***	.20***	.08***	.12***	.10***	.15***	.21***	.14***	.12***	.72***	.76***				
20 Child delinquency past year	.34***	.35***	.34***	.22***	.22***	.09***	.03***	.07***	.07***	.04***	.09***	.07***	.08***	.01	.03***	.05***	.09***	.03***	.07***	.08***		
21 Child age	.35***	.21***	.29***	.20***	.12***	.11***	.03***	.09***	.09***	.04***	.01	.01	.01	.01	.01	.03***	.08***	.03***	.06***	.08***	.24***	
22 Child high school dropout	.23***	.17***	.19***	.11***	.10***	.01	.01	.00	.06***	.02	.04***	.04***	.04***	.04***	.01	.03***	.00	.06***	.03***	.08***		

<sup>1</sup> Pairwise correlations.

\*p<.05; \*\*p<.01; \*\*\*p<.001

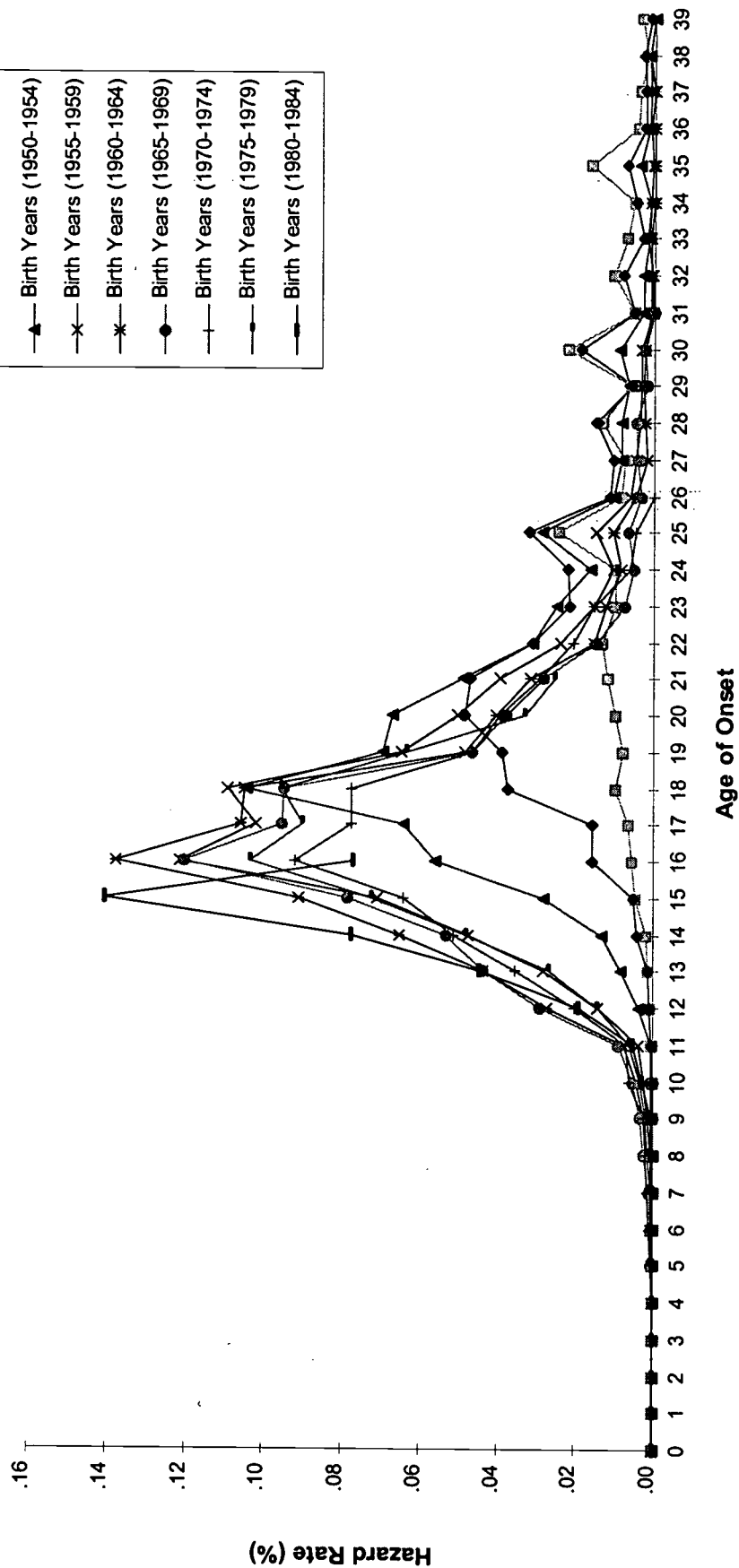
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

# APPENDIX FIGURES

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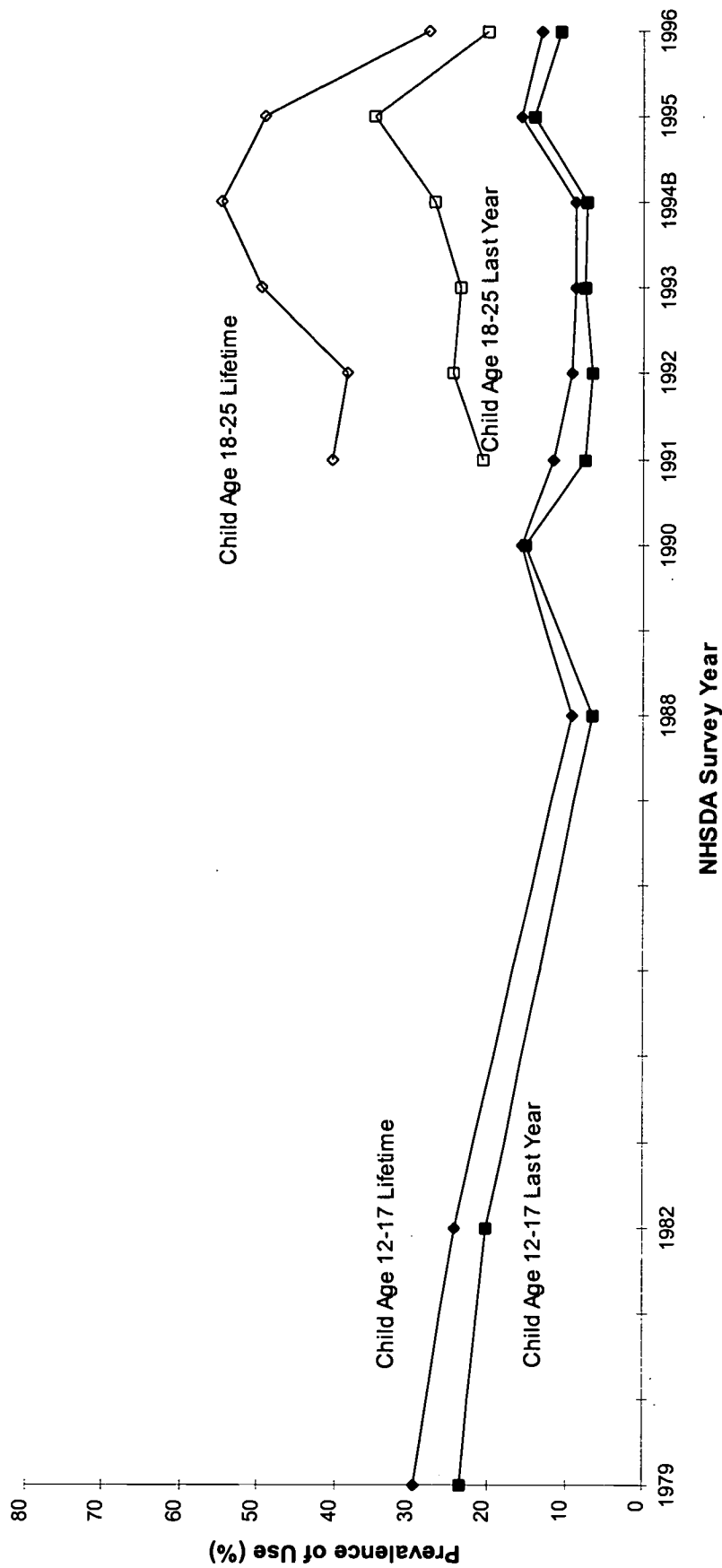
253

**Figure A.2.1. Hazard Rates of Marijuana Use Initiation by Age by Five-Year Birth Cohort Groups in the US Population (NHSDA 1979-1996)**



Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse

**Figure A.5.1. Trends in Prevalence of Lifetime and Last Year Marijuana Use Among Children Aged 12-17 and 18-25 in Parent-Child Dyads<sup>1</sup> (NHSDA 1979-1996)**



<sup>1</sup> Adjusted estimates based on the 1991 distribution of child age for 12-17 and 18-25 year olds.  
Source: SAMHSA, Office of Applied Studies, National Household Survey on Drug Abuse.

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- D-13: Drug Abuse Warning Network Annual Medical Examiner Data 1998
- D-14: Mid-Year 1999 Preliminary Emergency Department Data from the Drug Abuse Warning Network
- D-15: Year-End 1999 Emergency Department Data from the Drug Abuse Warning Network
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(Continued on next page)



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